

Figure 1

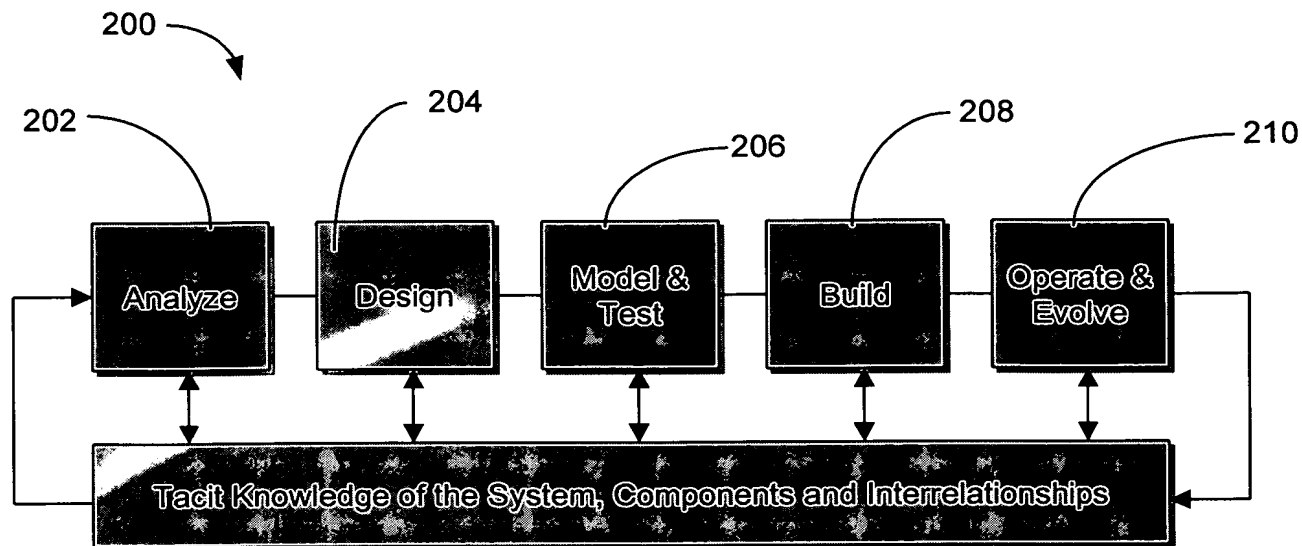


Figure 2

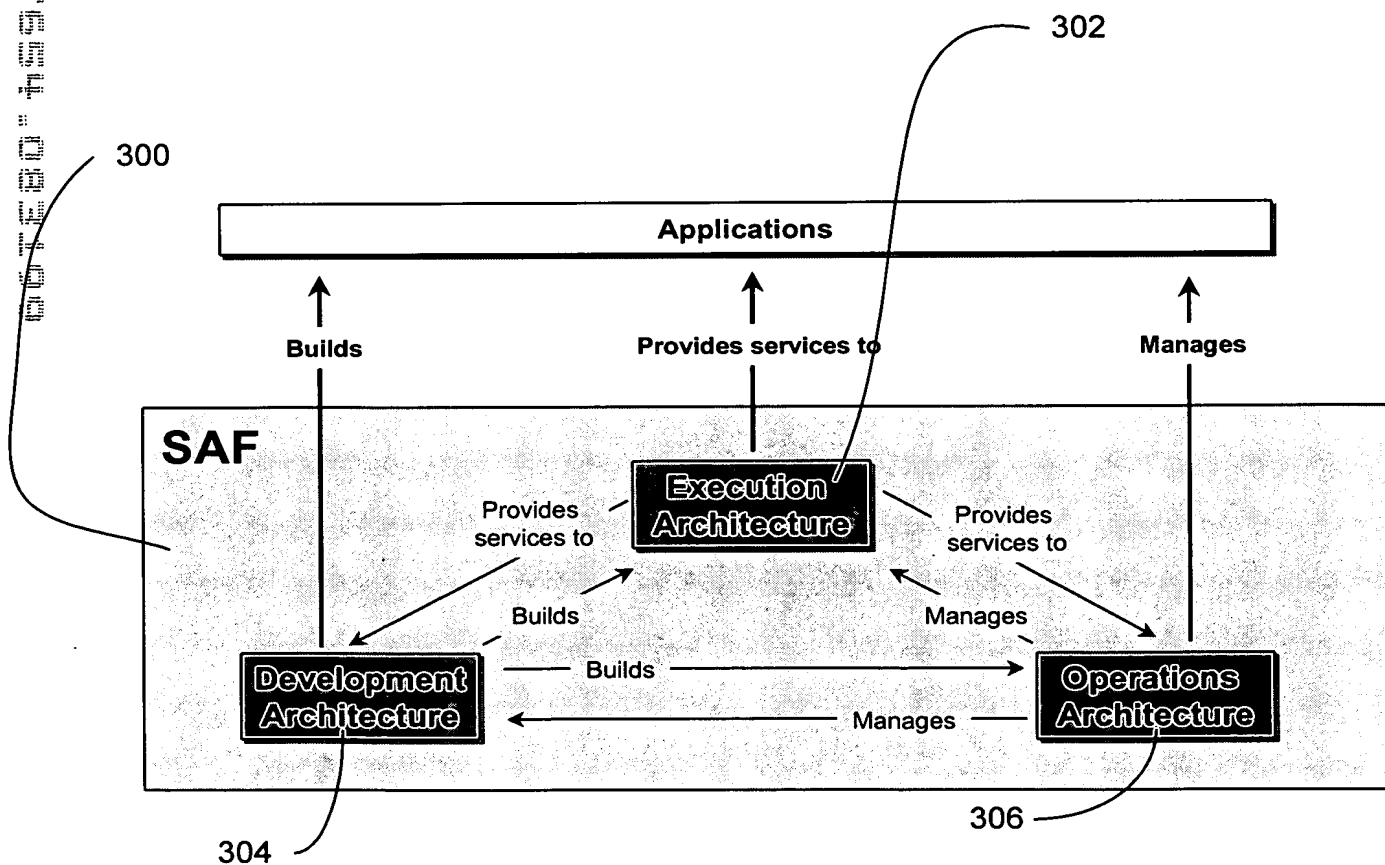


Figure 3

09387654-083199
067680-45928660

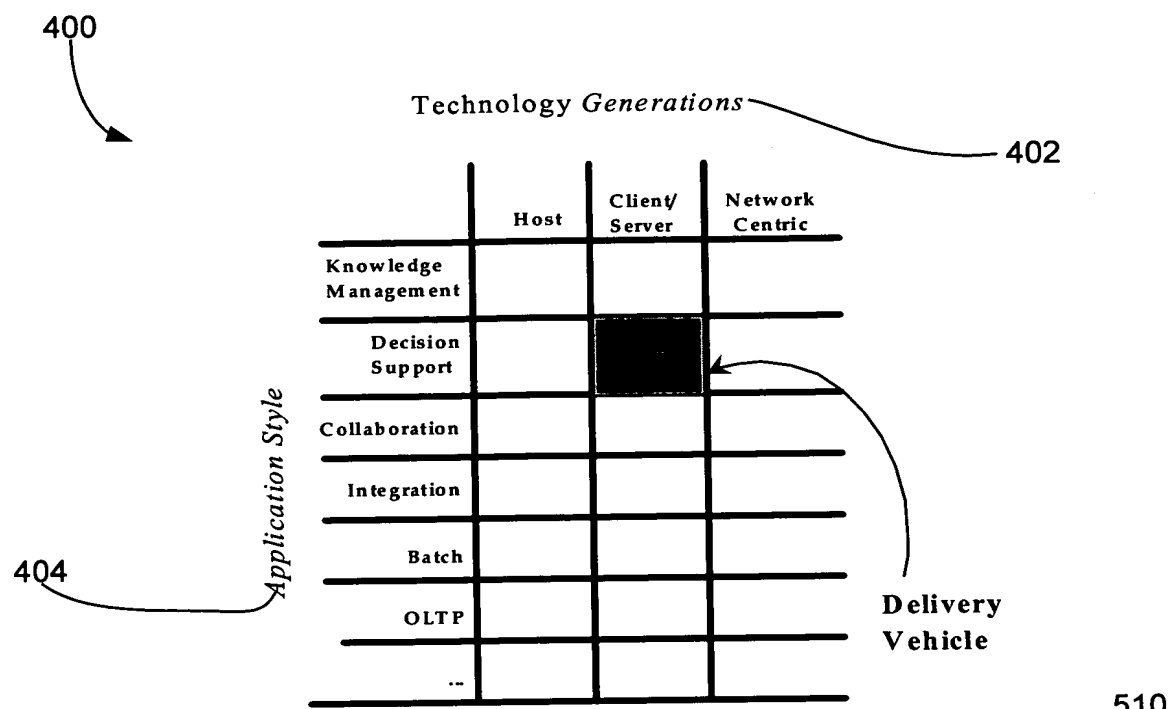
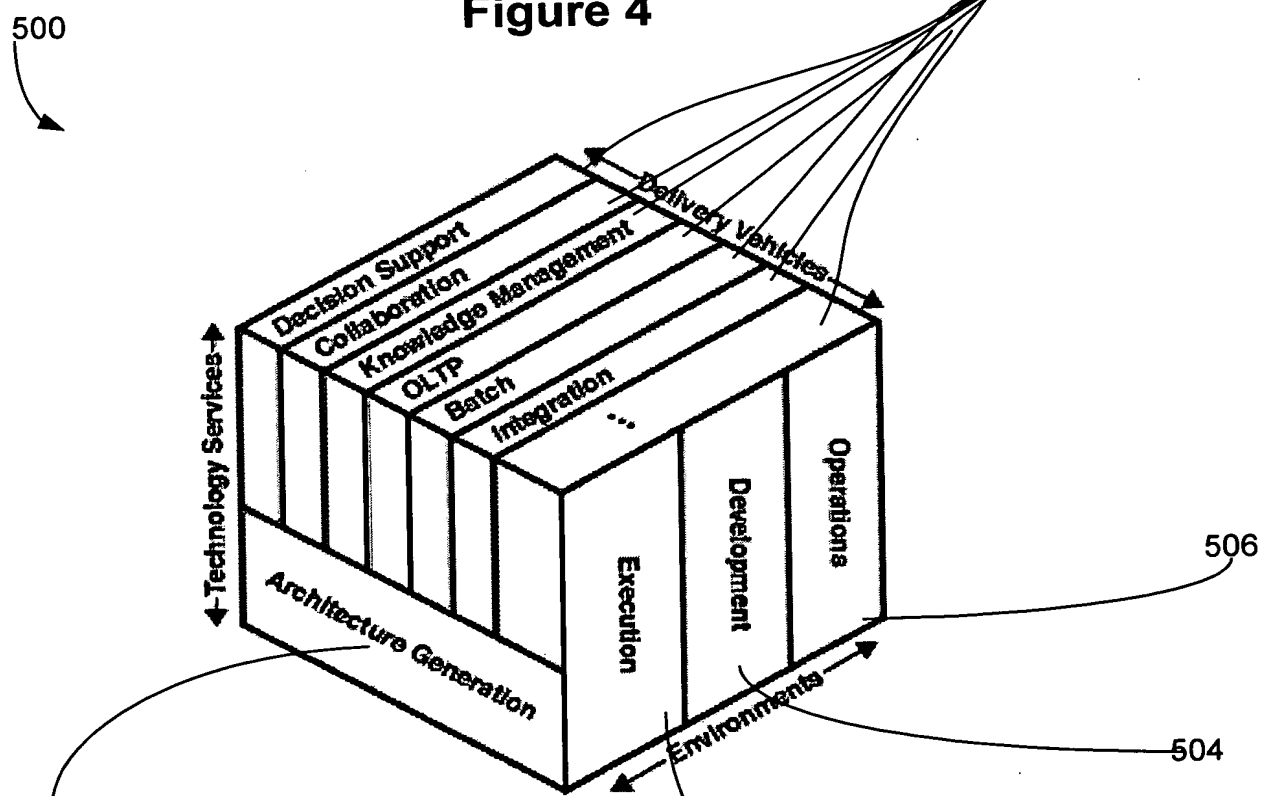


Figure 4



Figur 5

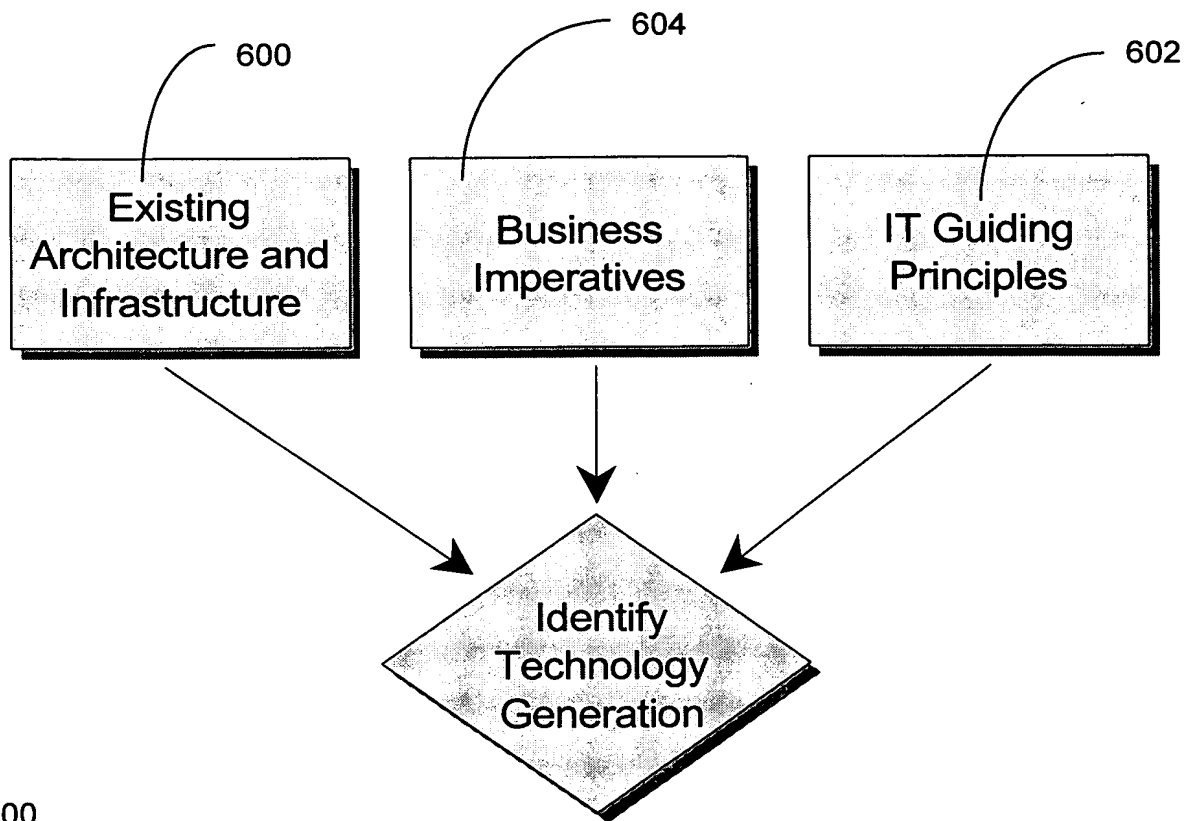


Figure 6

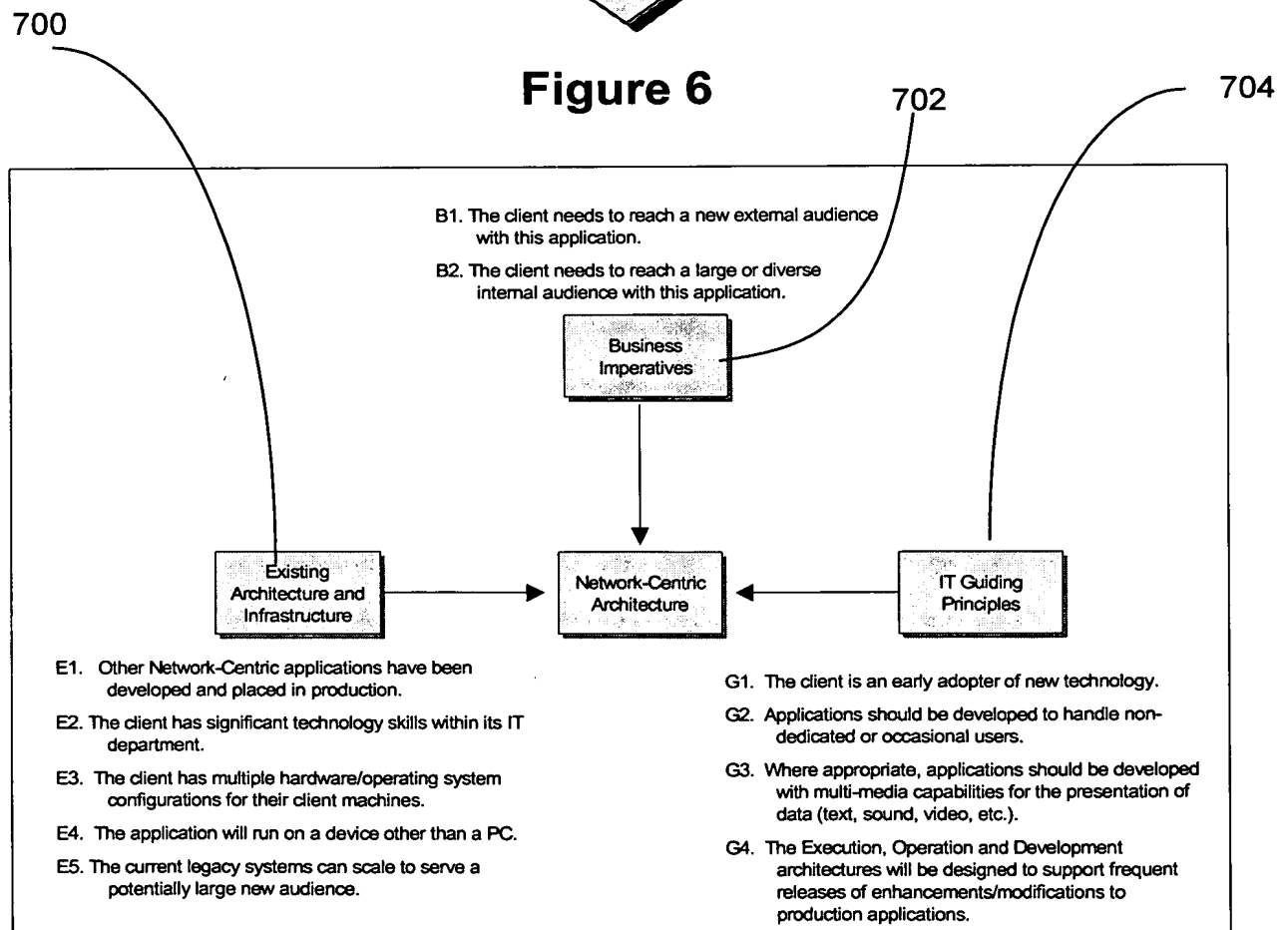


Figure 7

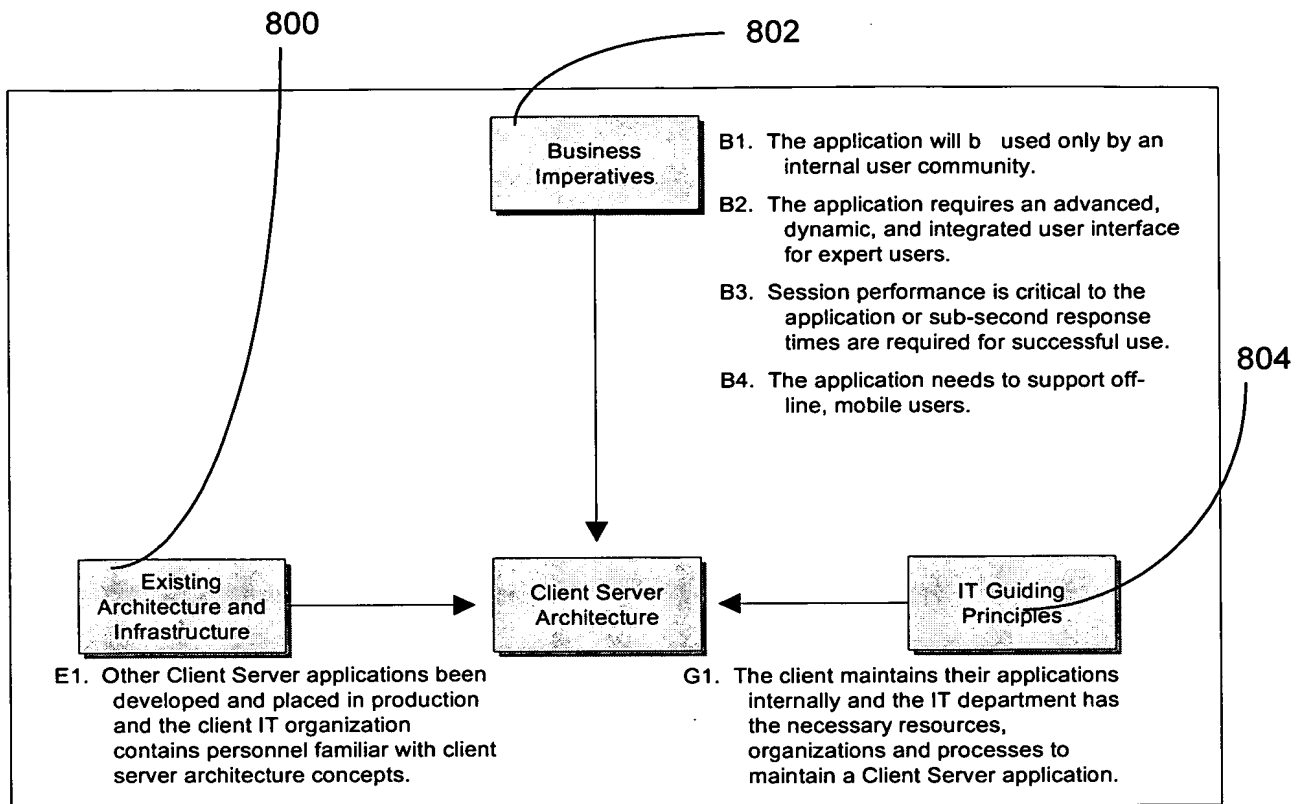
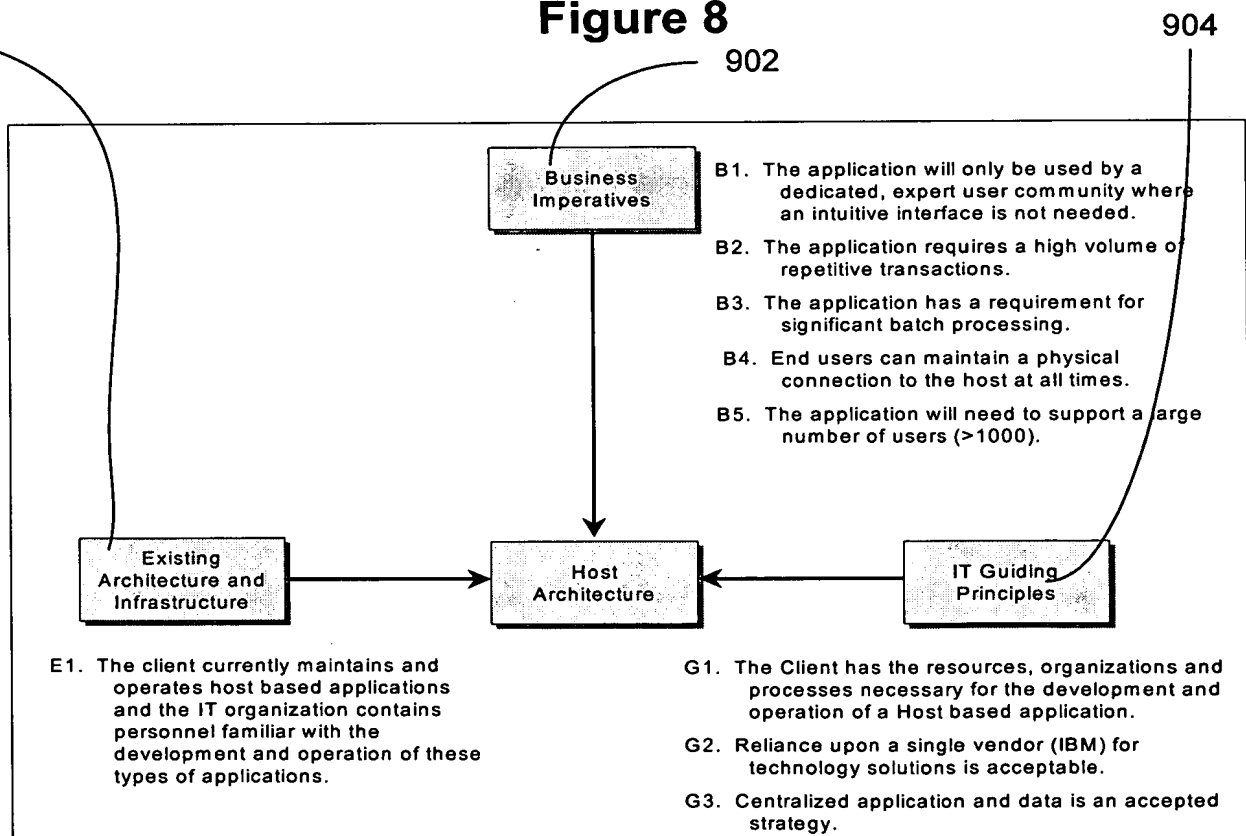
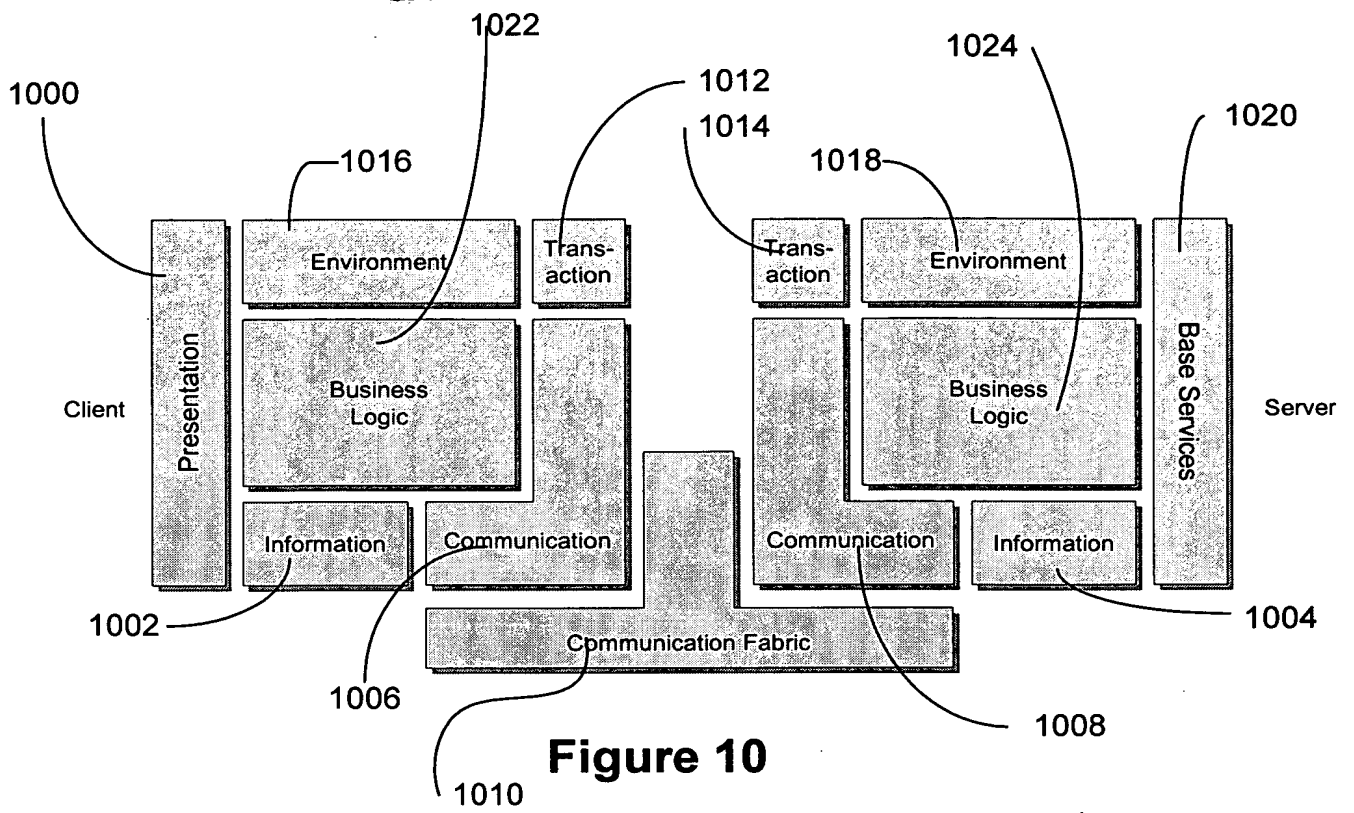


Figure 8



Figur 9

09387654-083199
66780-15928560



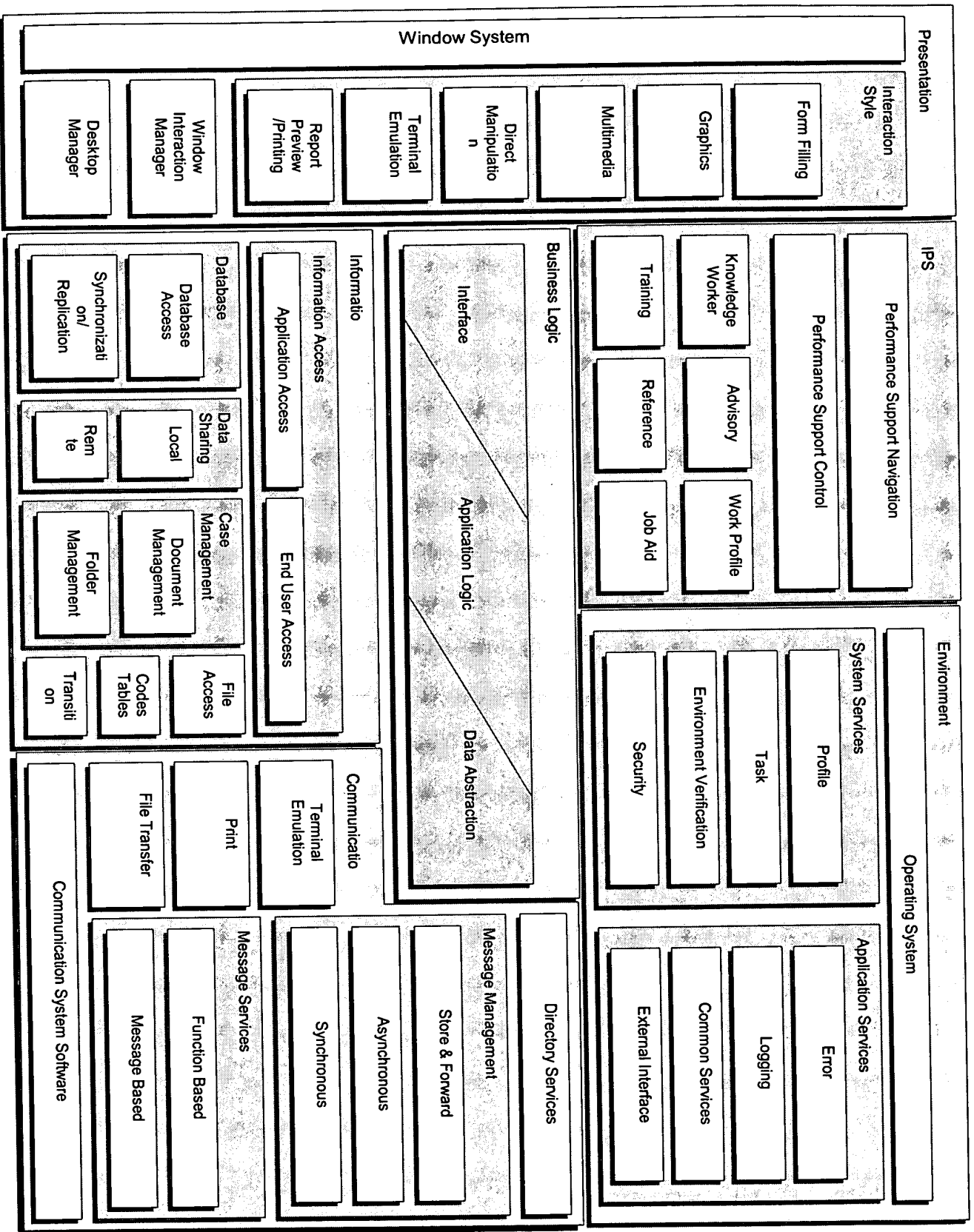


Figure 11

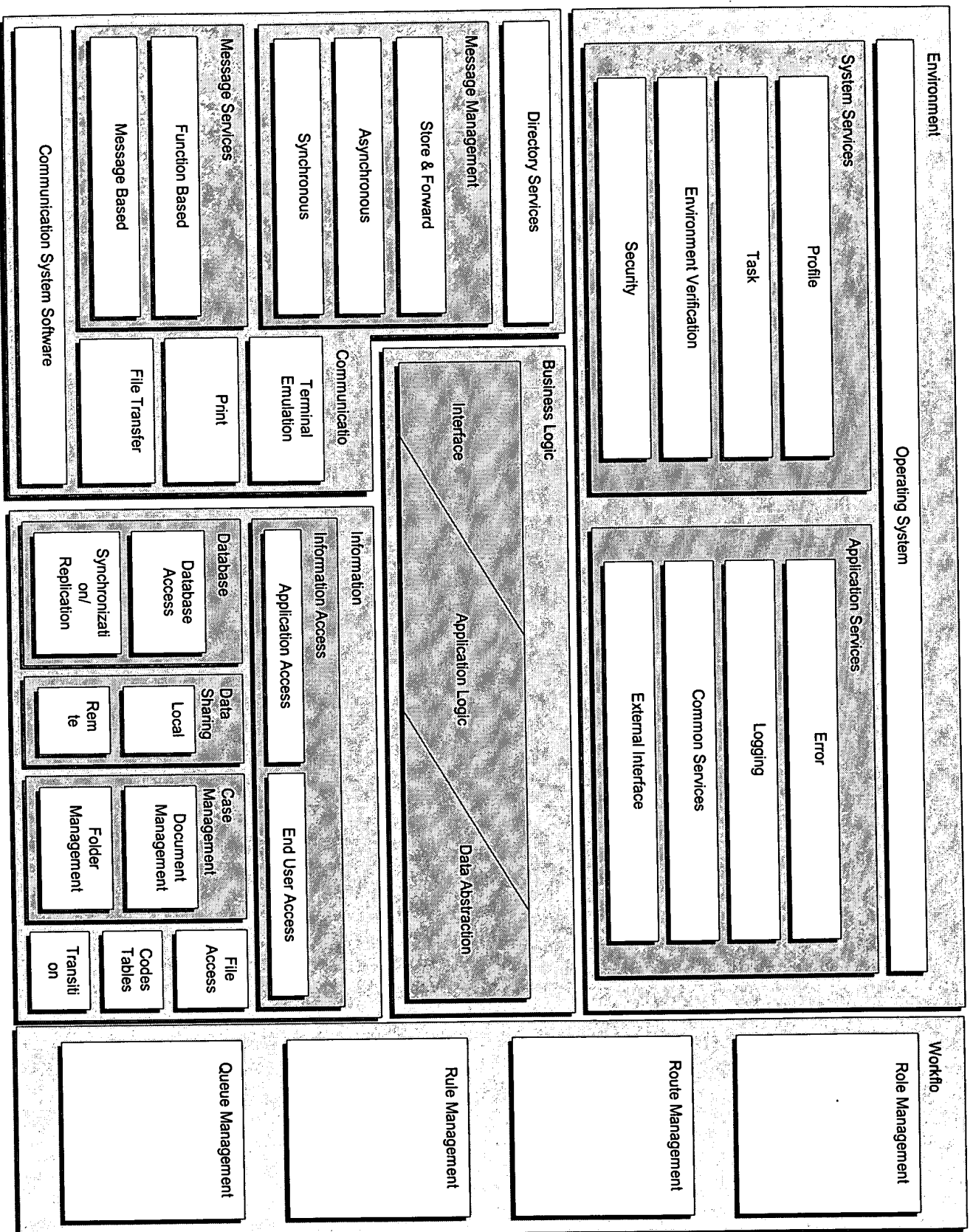


Figure 12

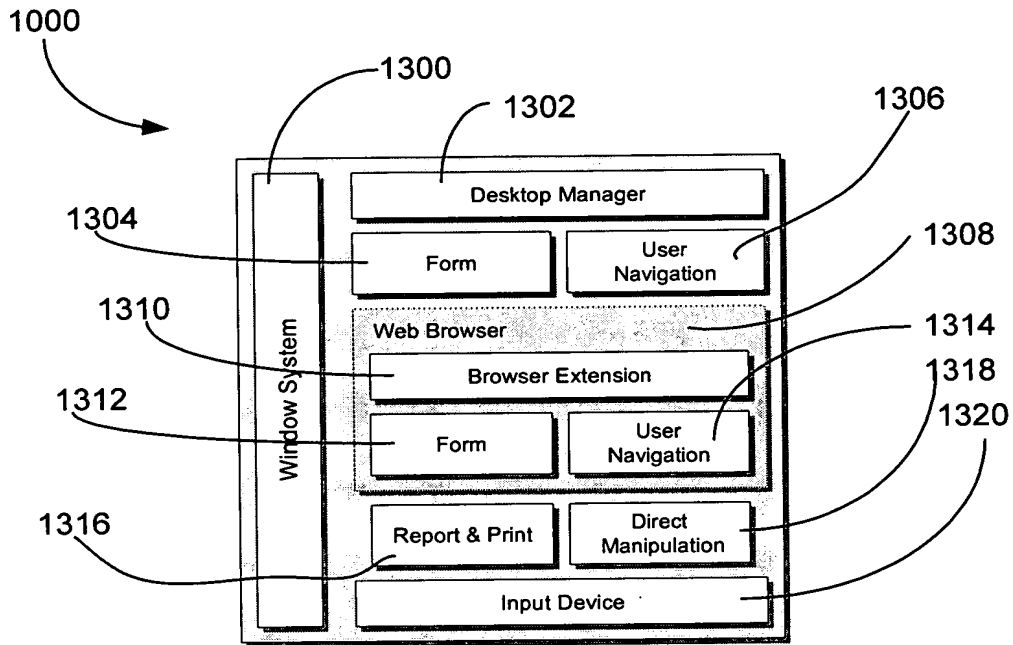


Figure 13

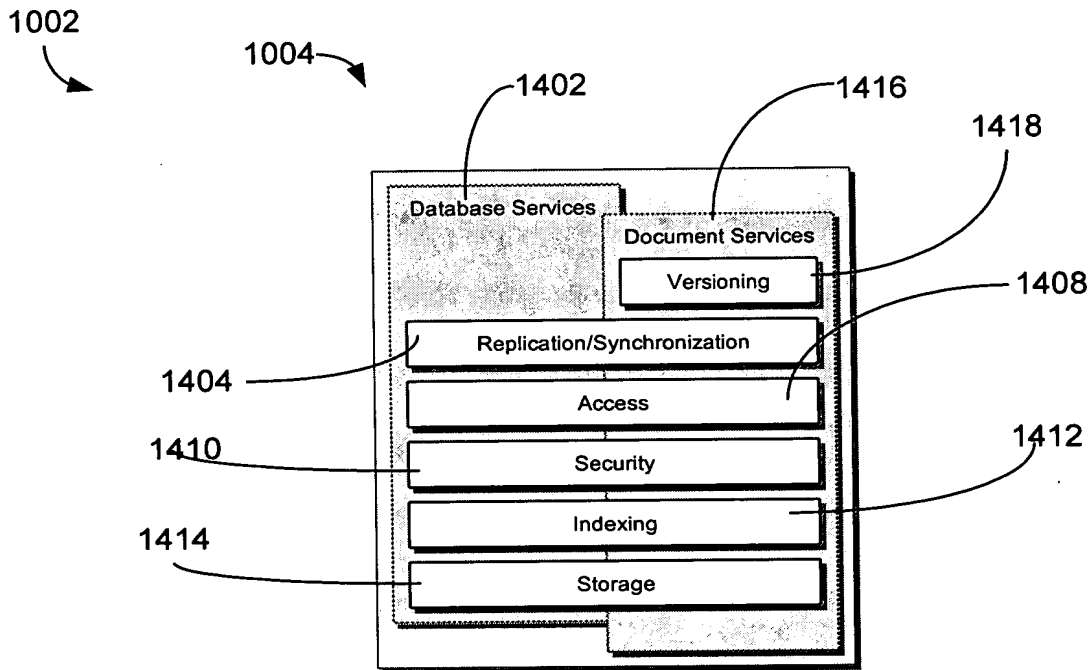
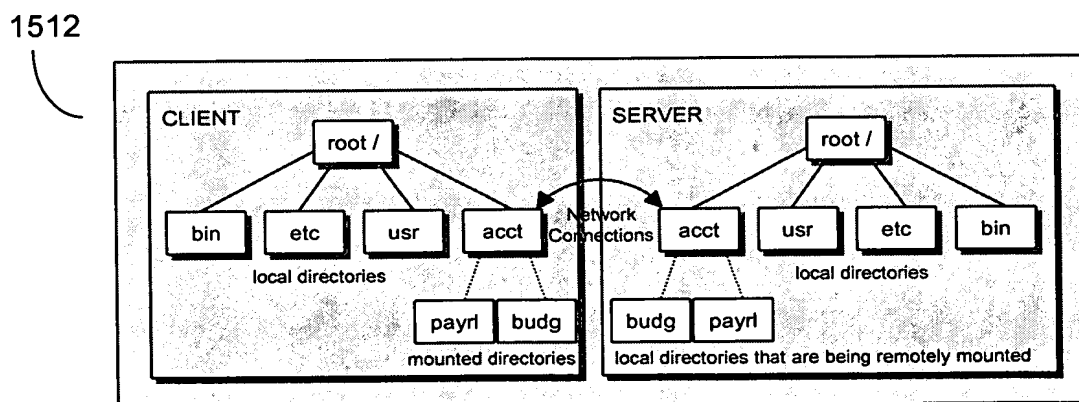
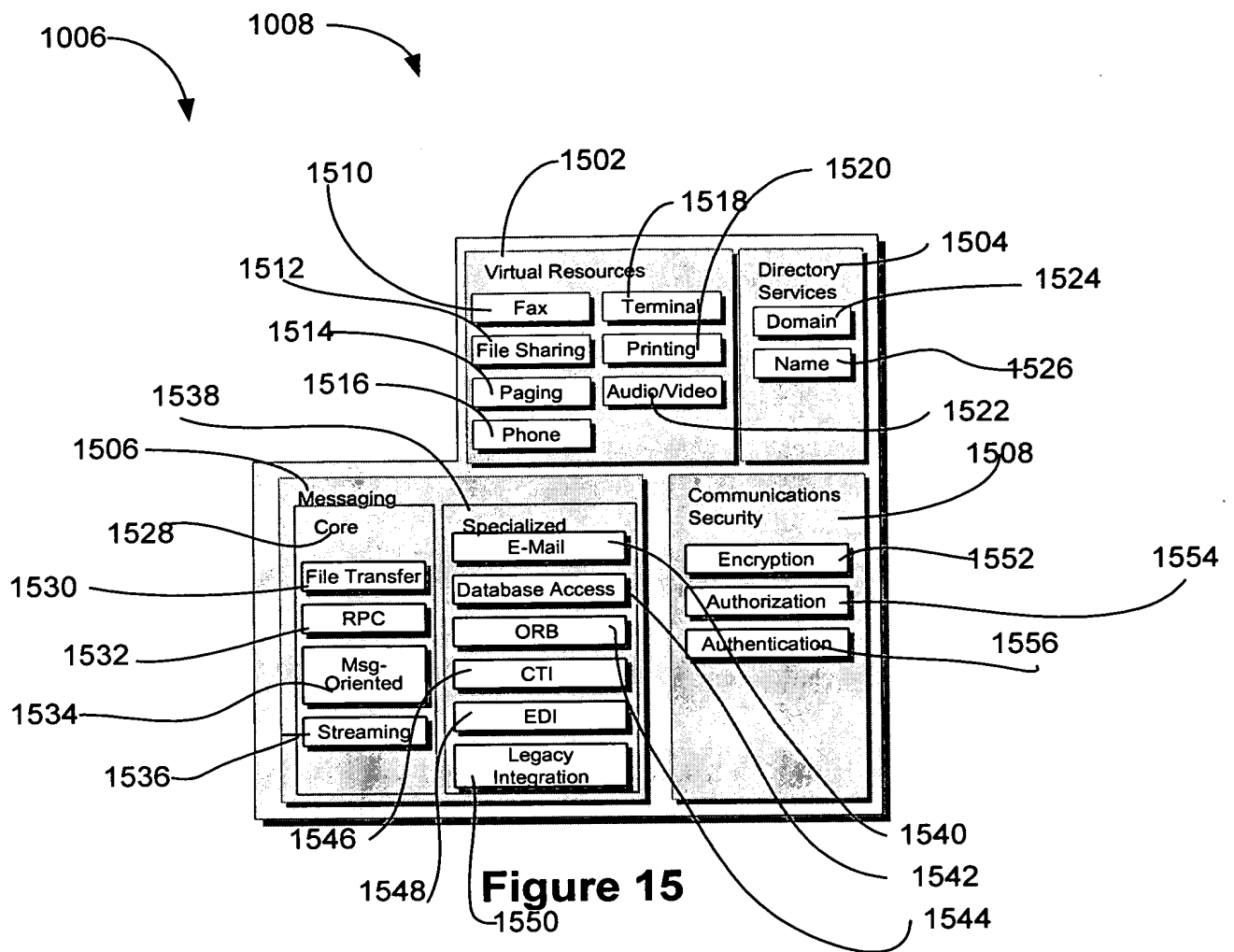


Figure 14



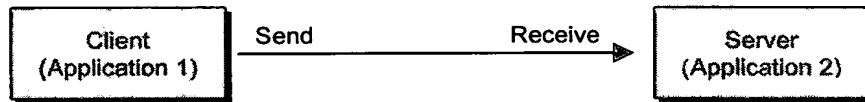


Figure 17

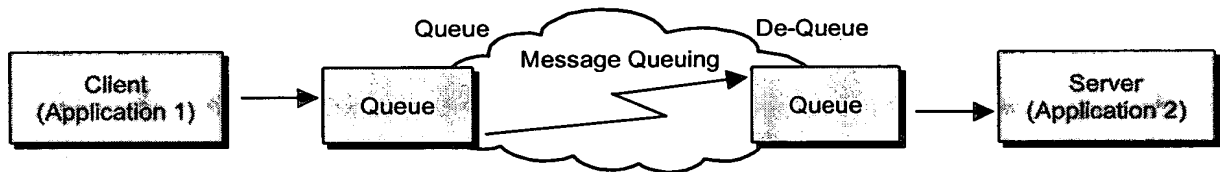


Figure 18

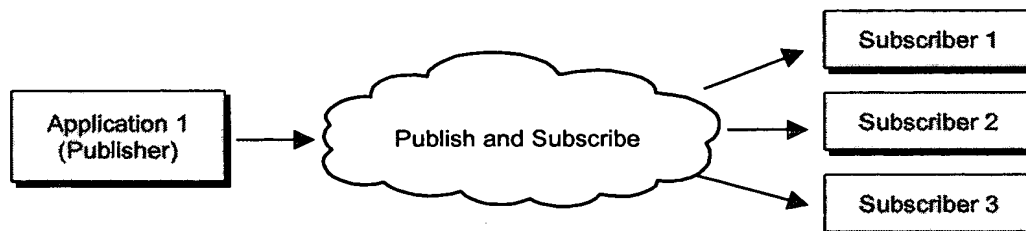


Figure 19

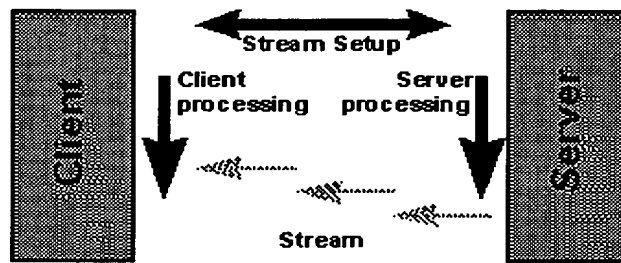


Figure 20

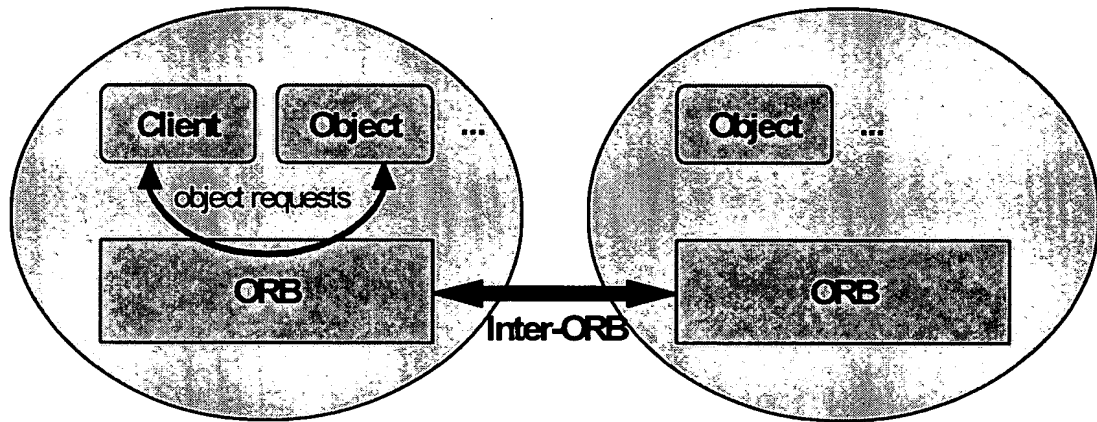


Figure 21

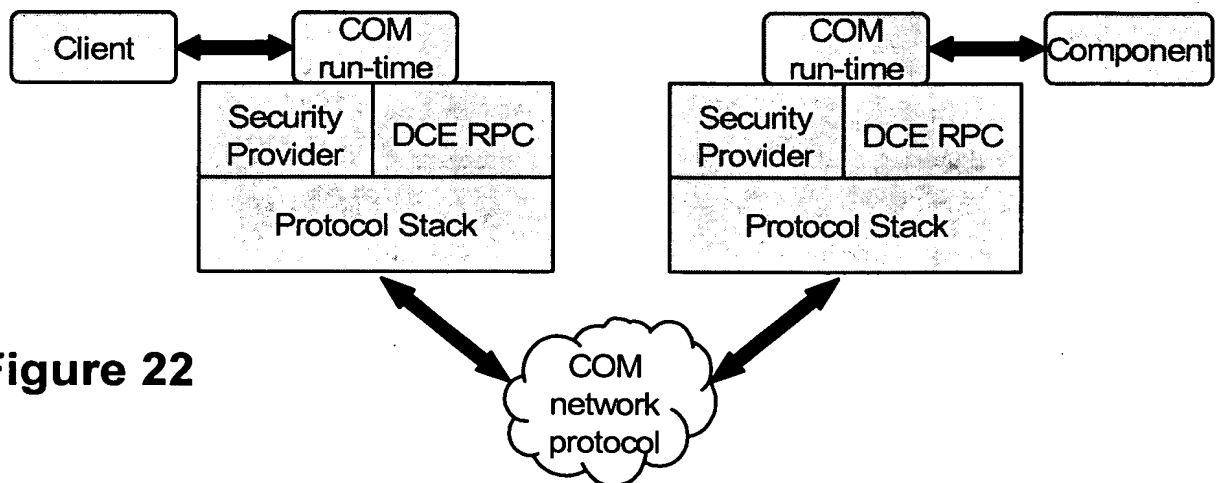


Figure 22

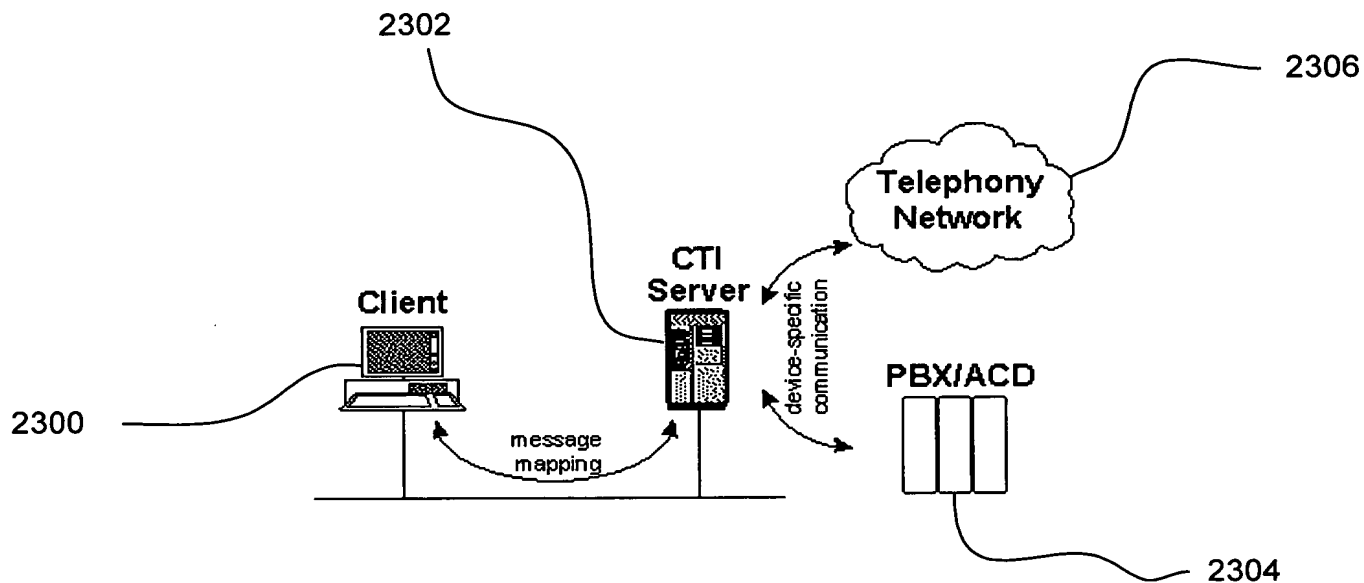


Figure 23

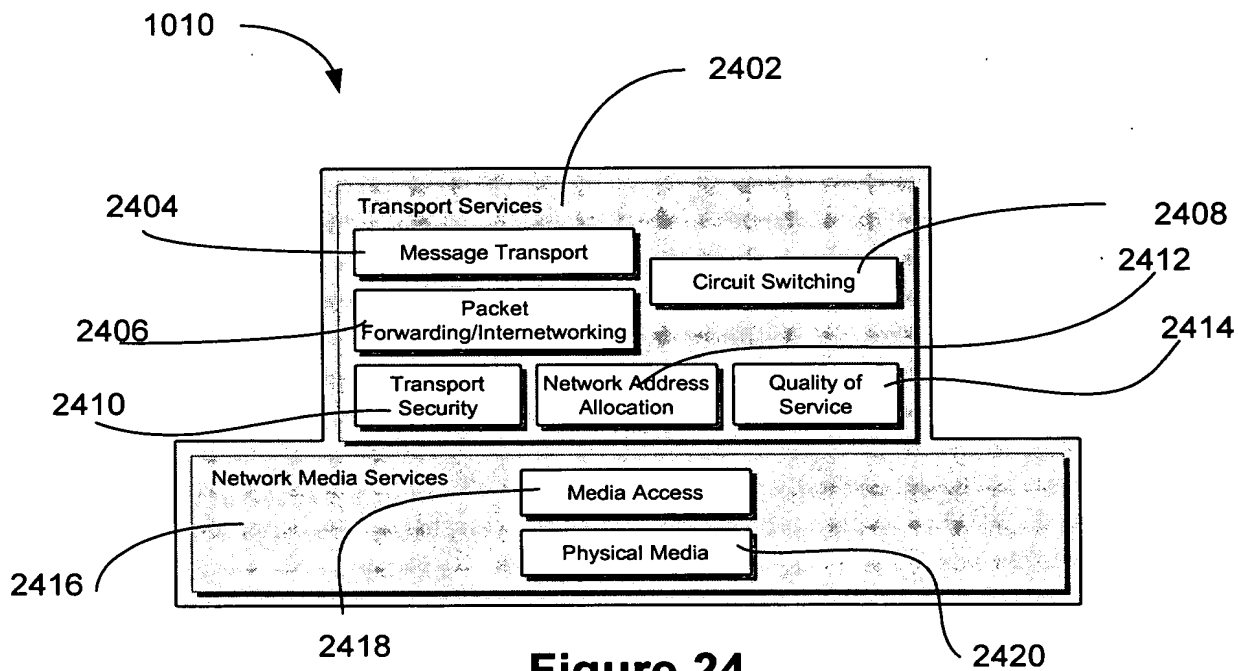


Figure 24

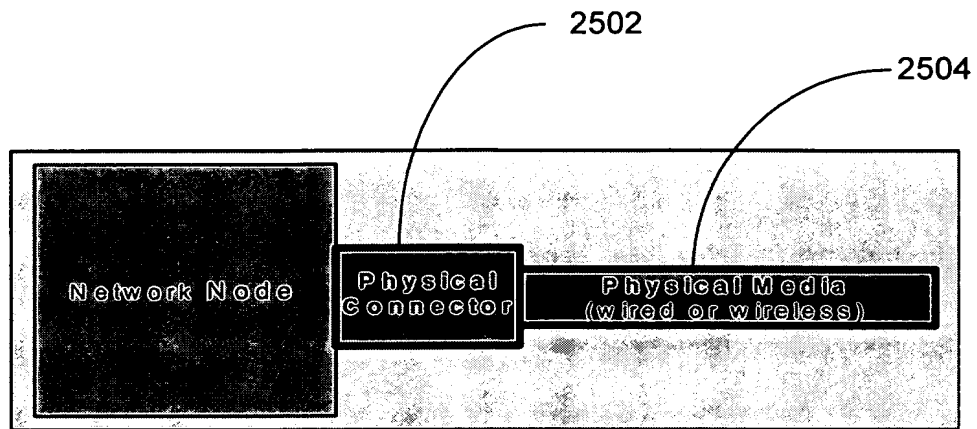


Figure 25

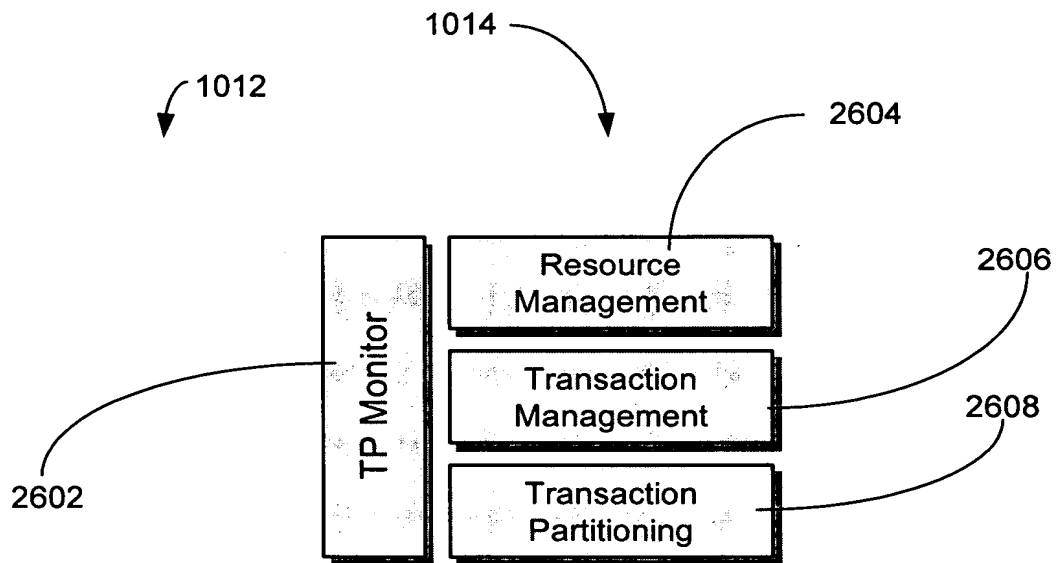


Figure 26

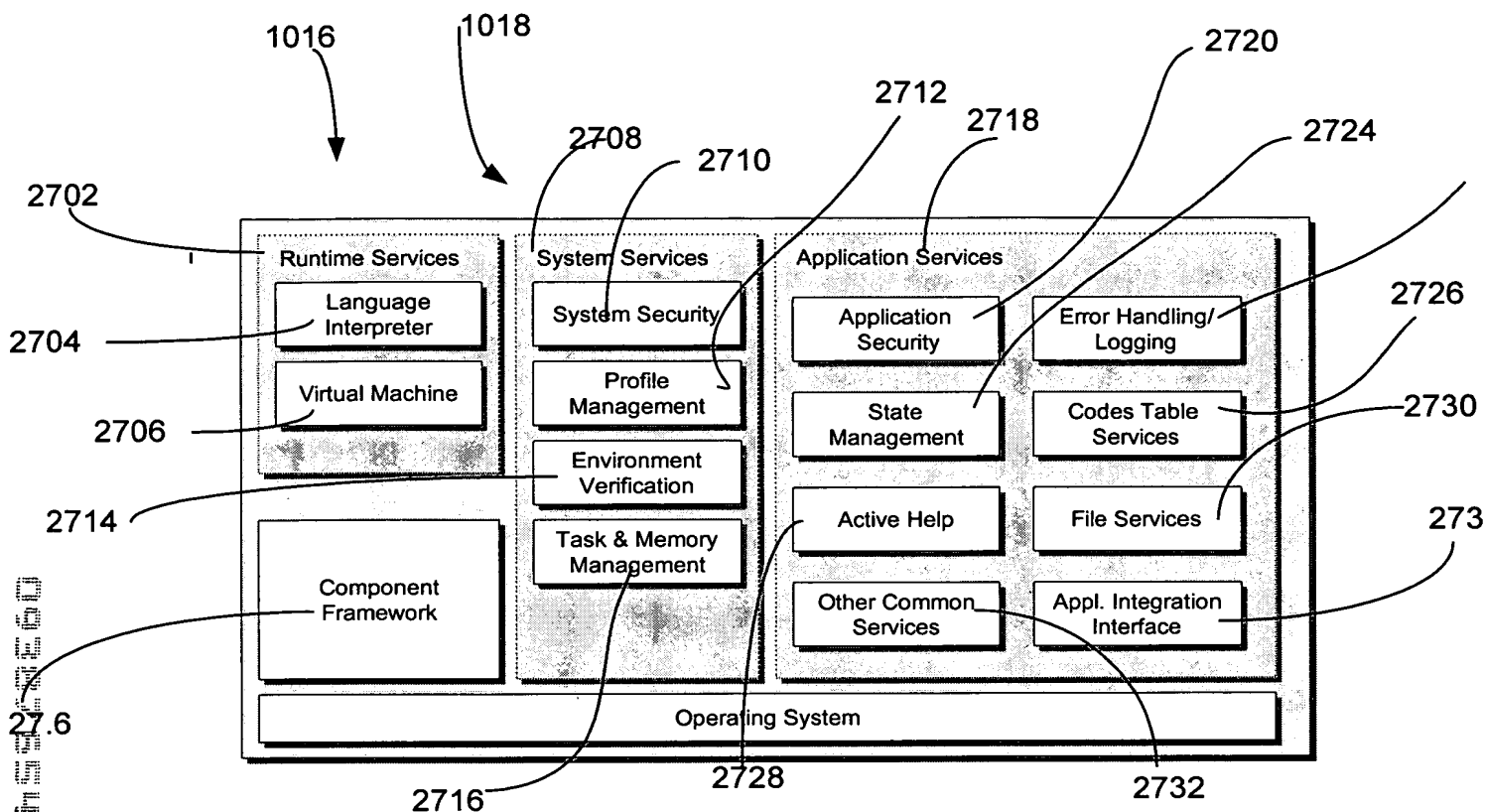


Figure 27

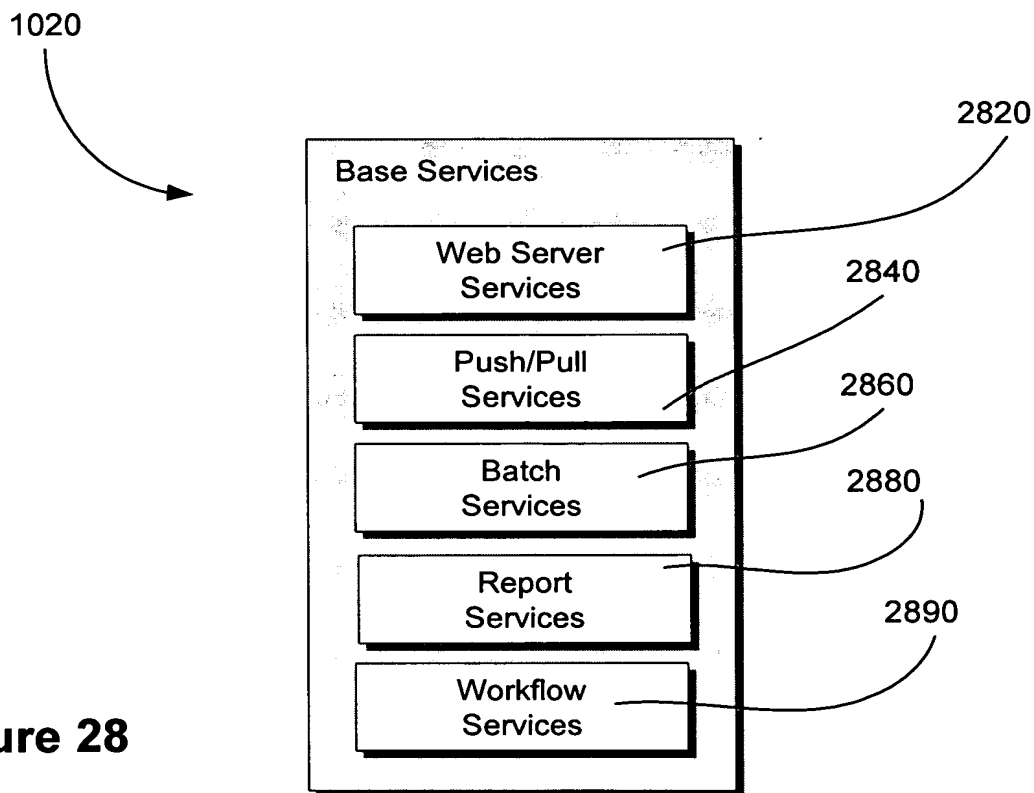


Figure 28

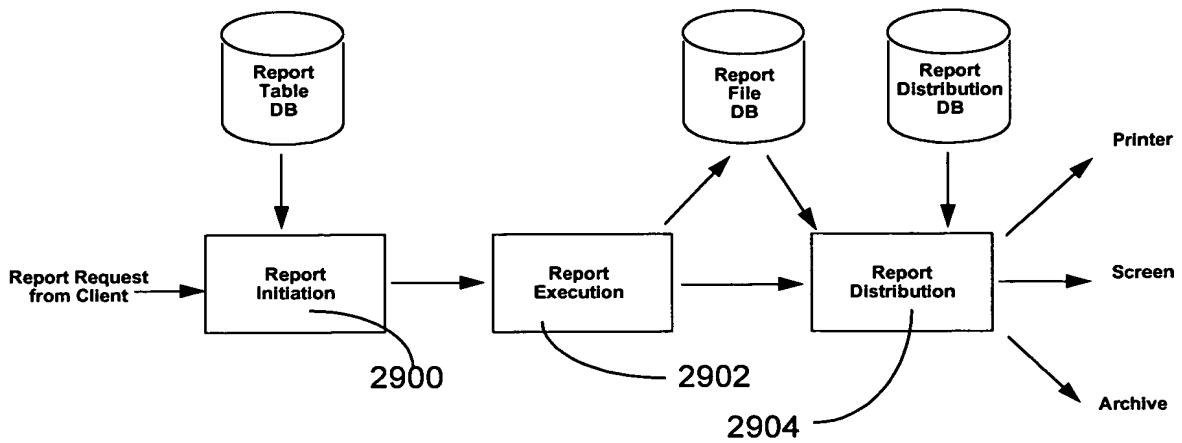


Figure 29

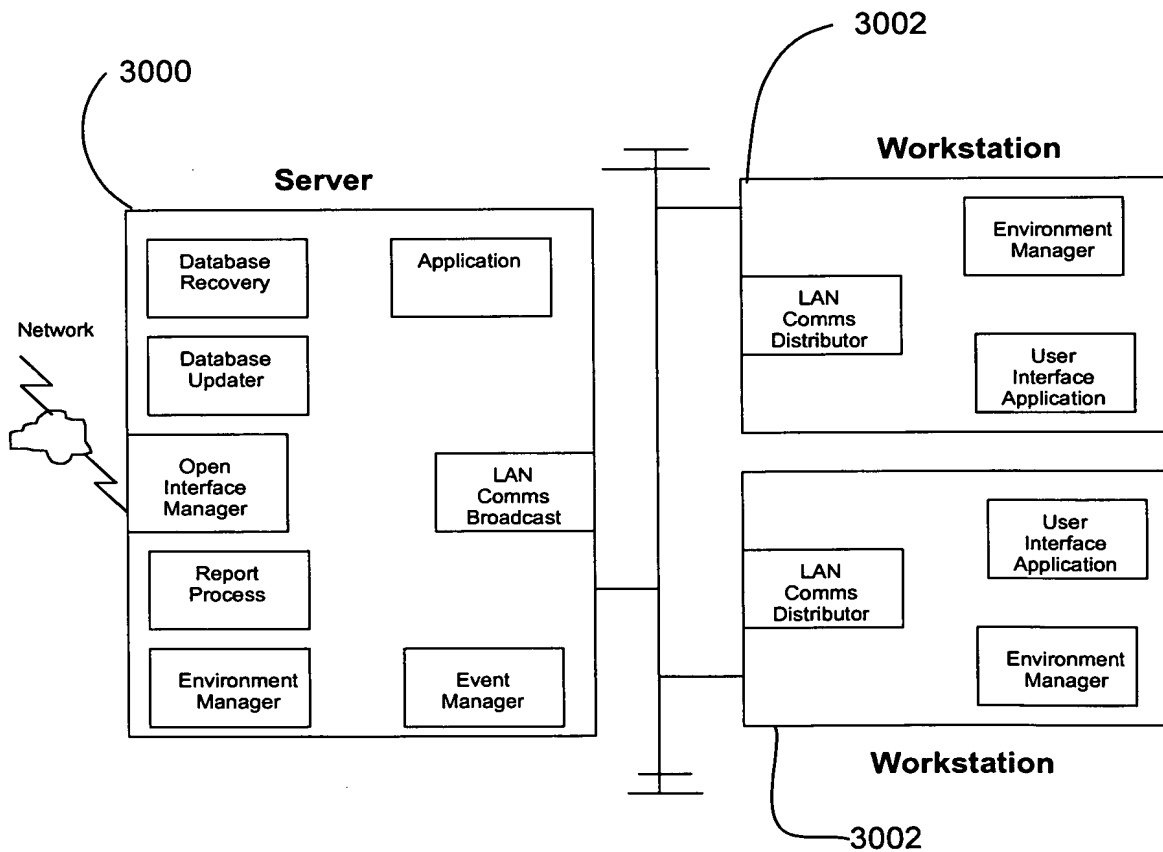


Figure 30

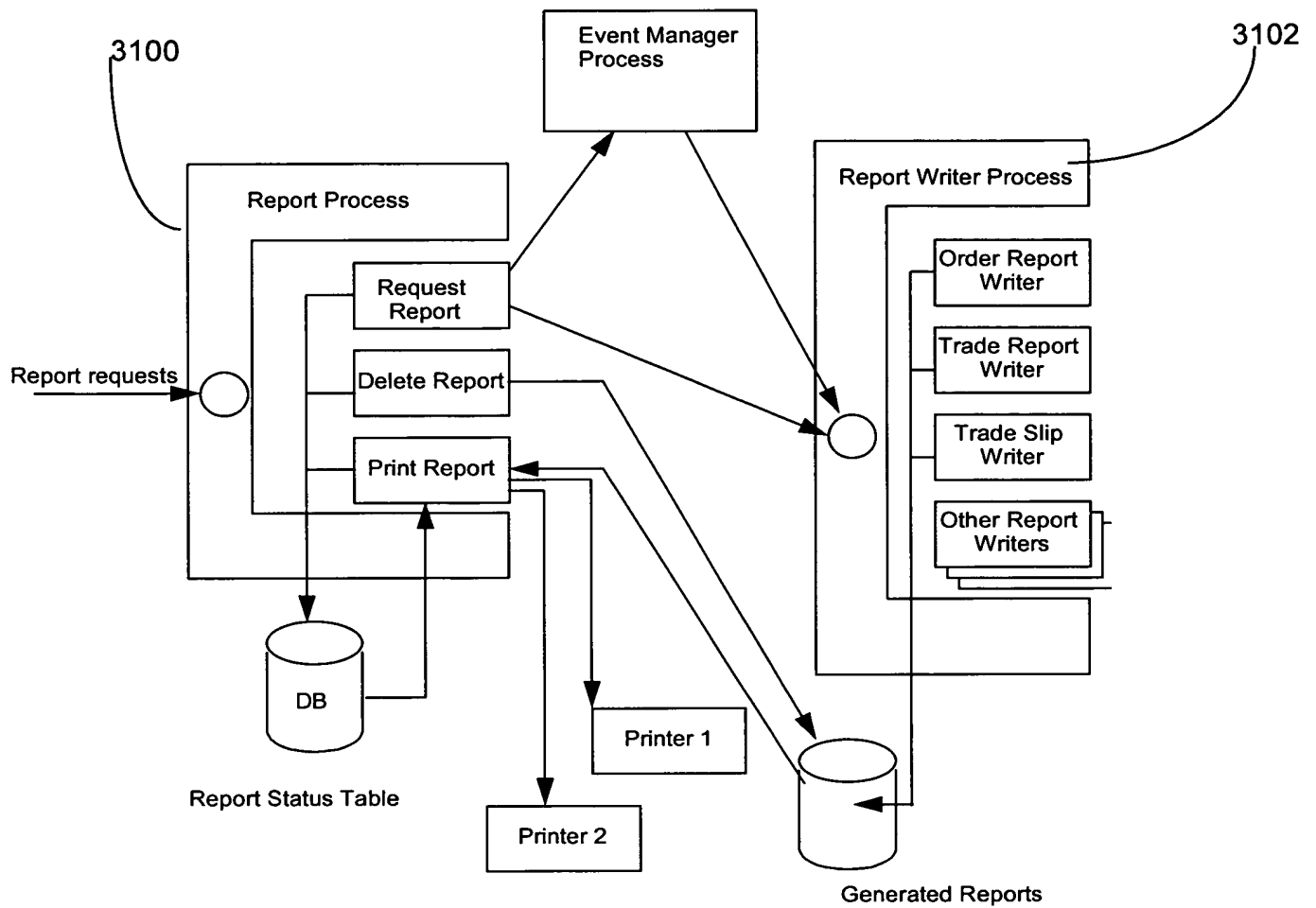


Figure 31

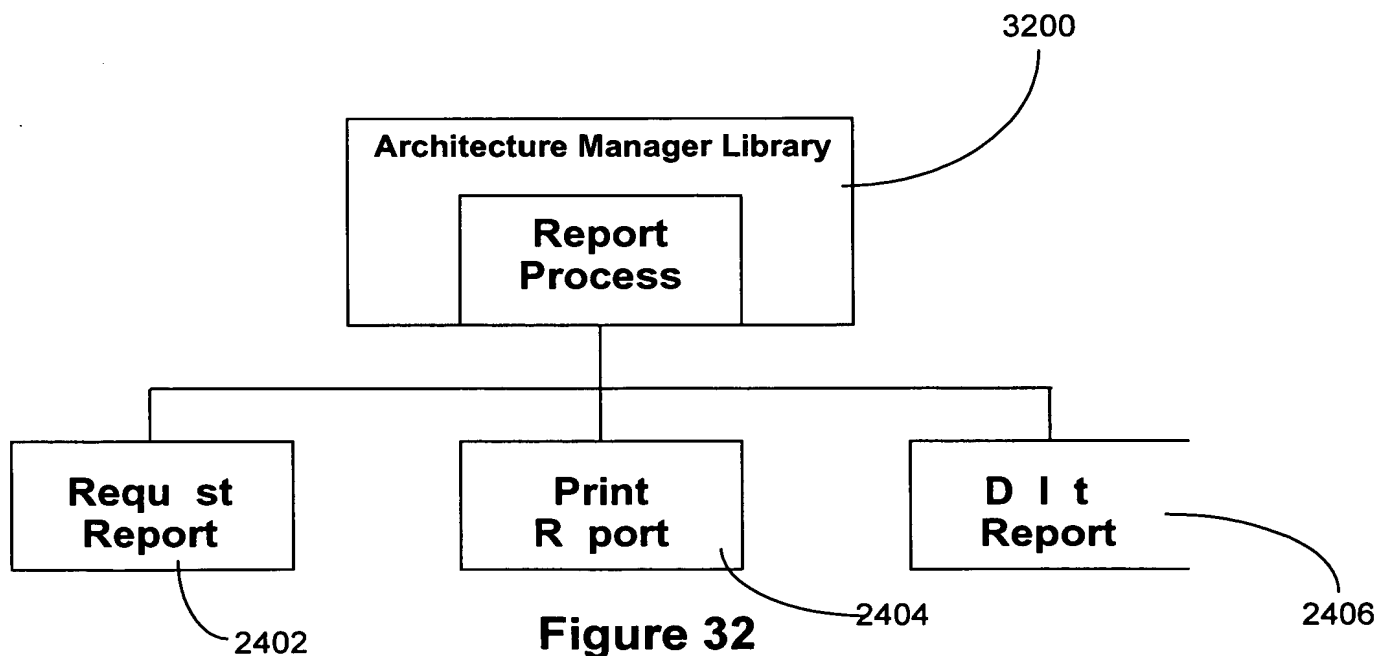


Figure 32



1022, 1024



3300

3302

3304

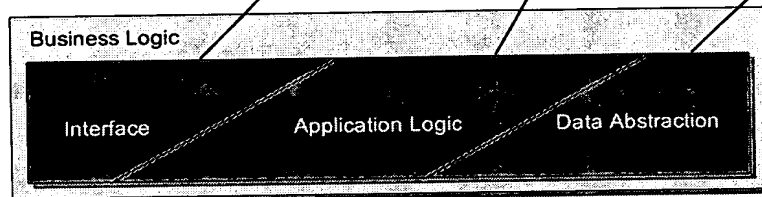


Figure 33

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Overall Themes

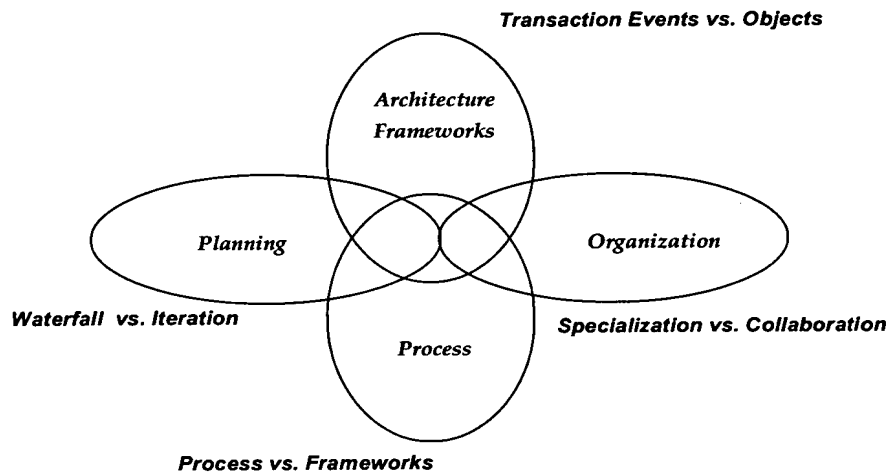


Figure 34

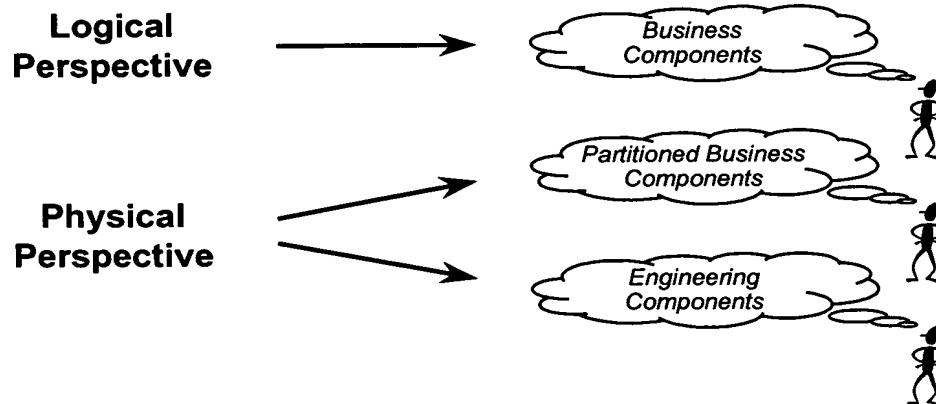


Figure 35

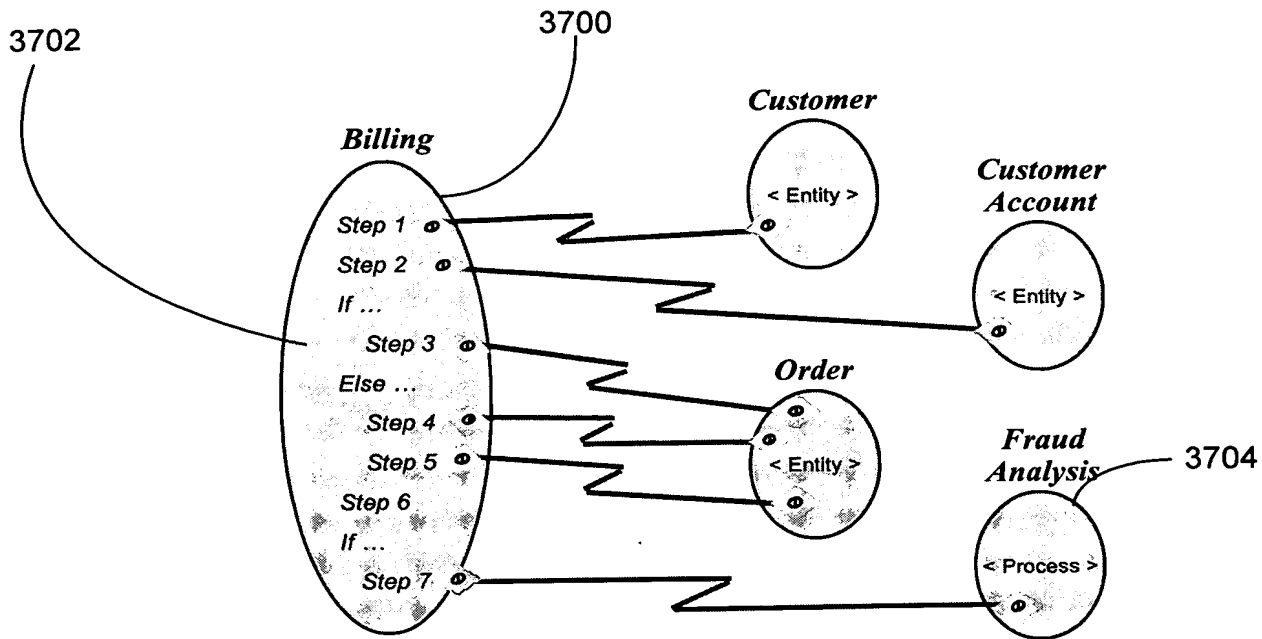


Figure 37

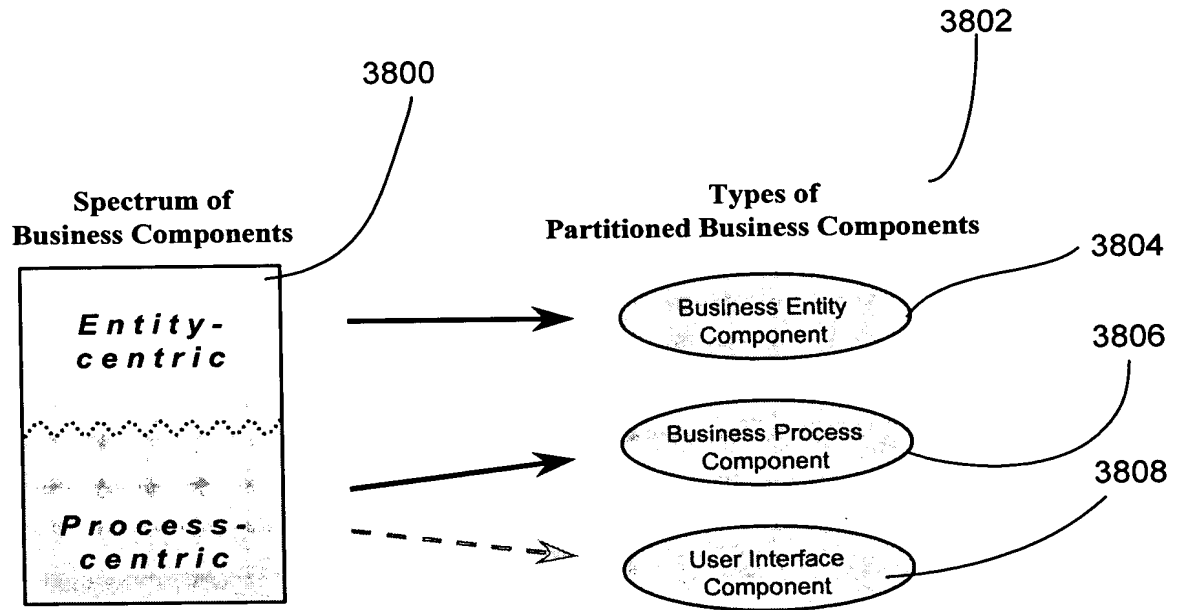


Figure 38

667230" 43926660

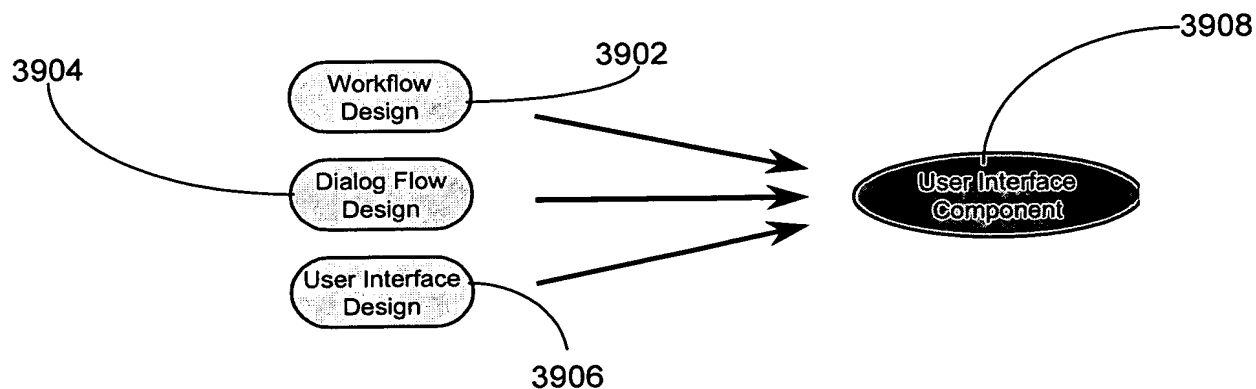


Figure 39

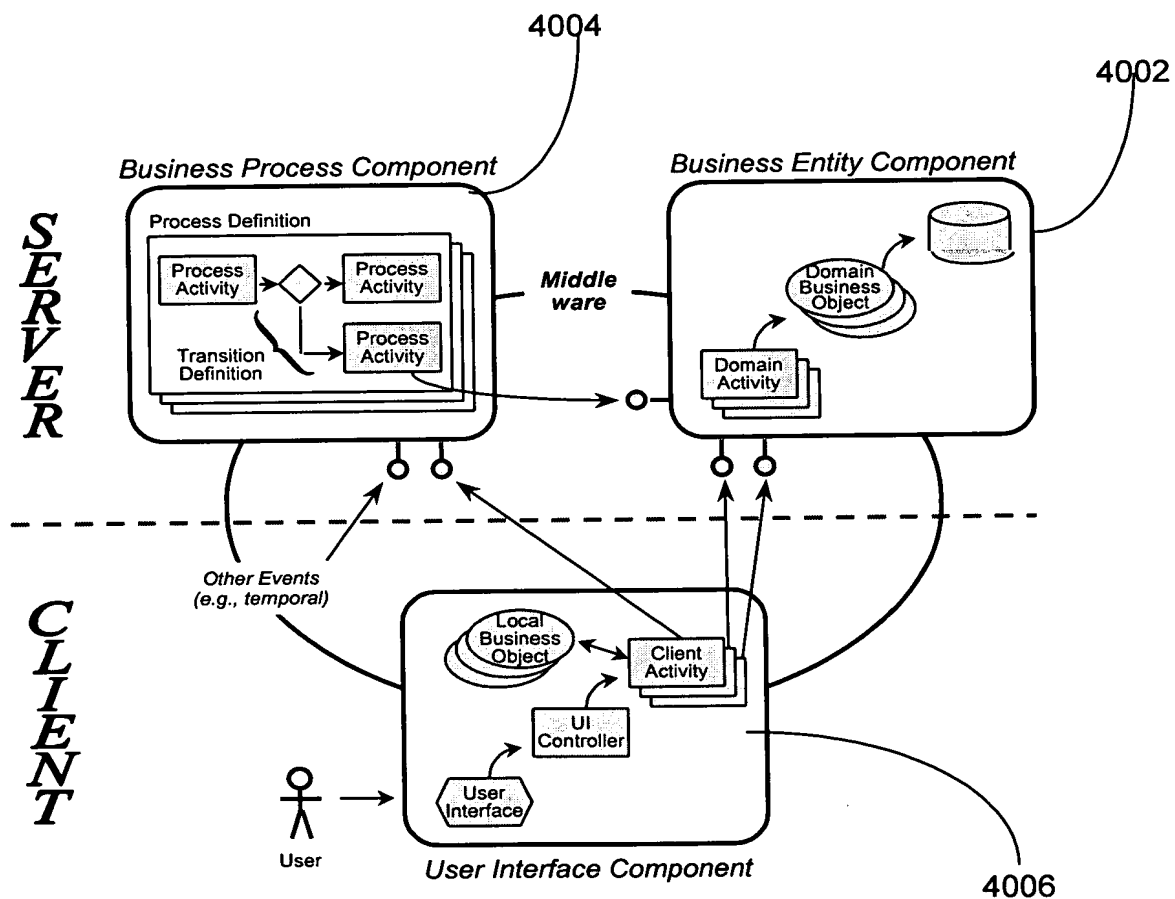


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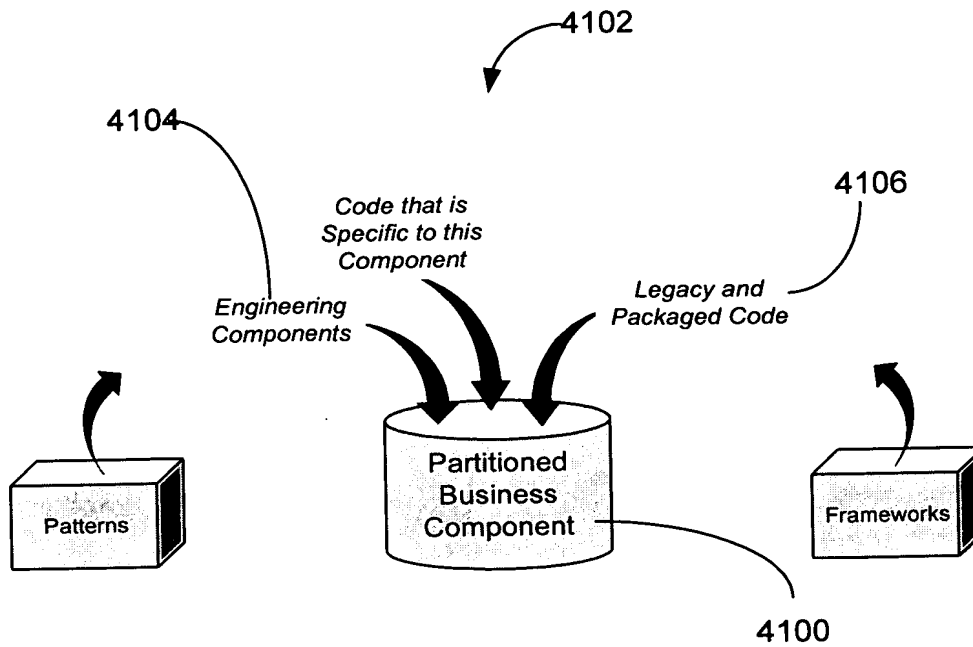


Figure 41

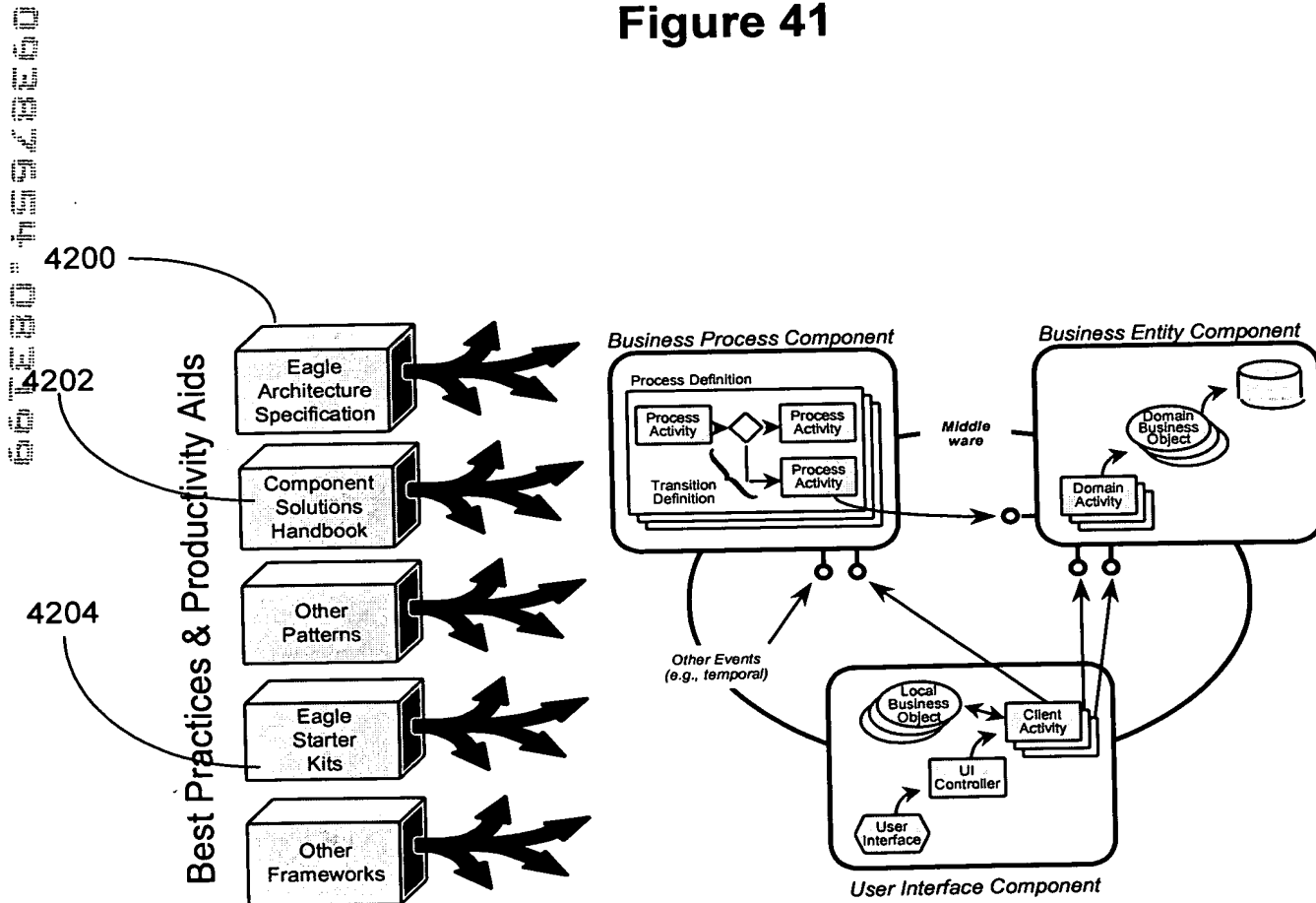


Figure 42

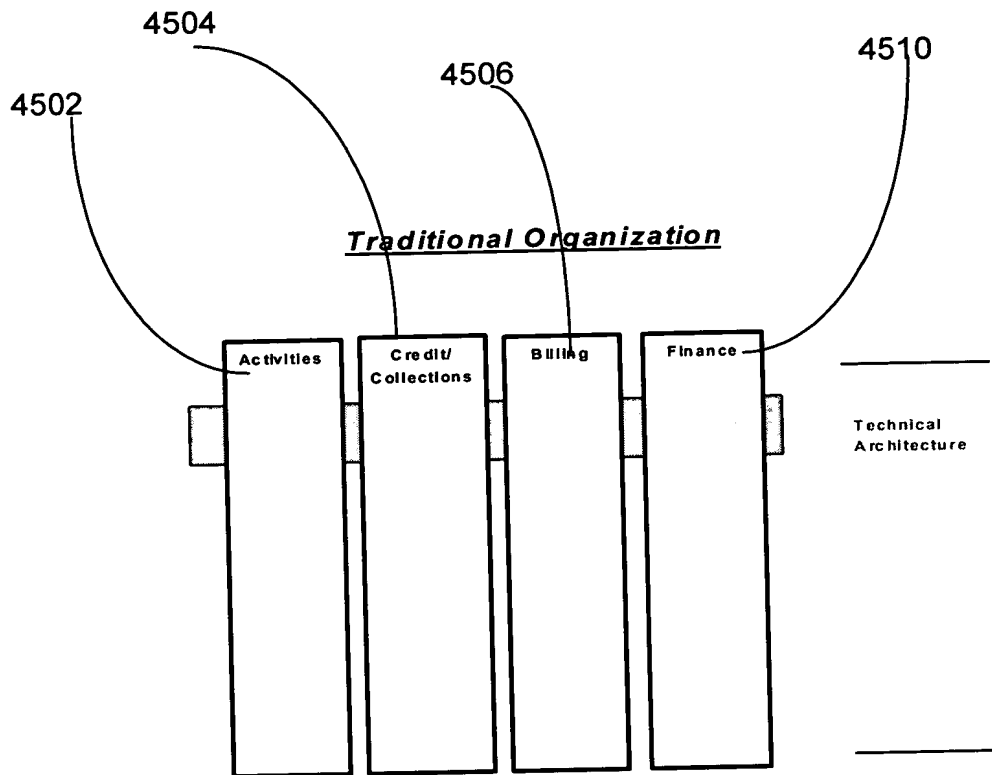


Figure 45

4600

Architecture-Based Organization

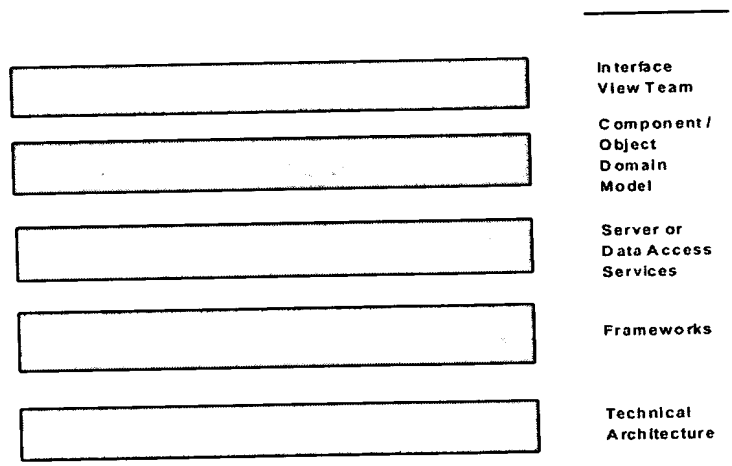


Figure 46

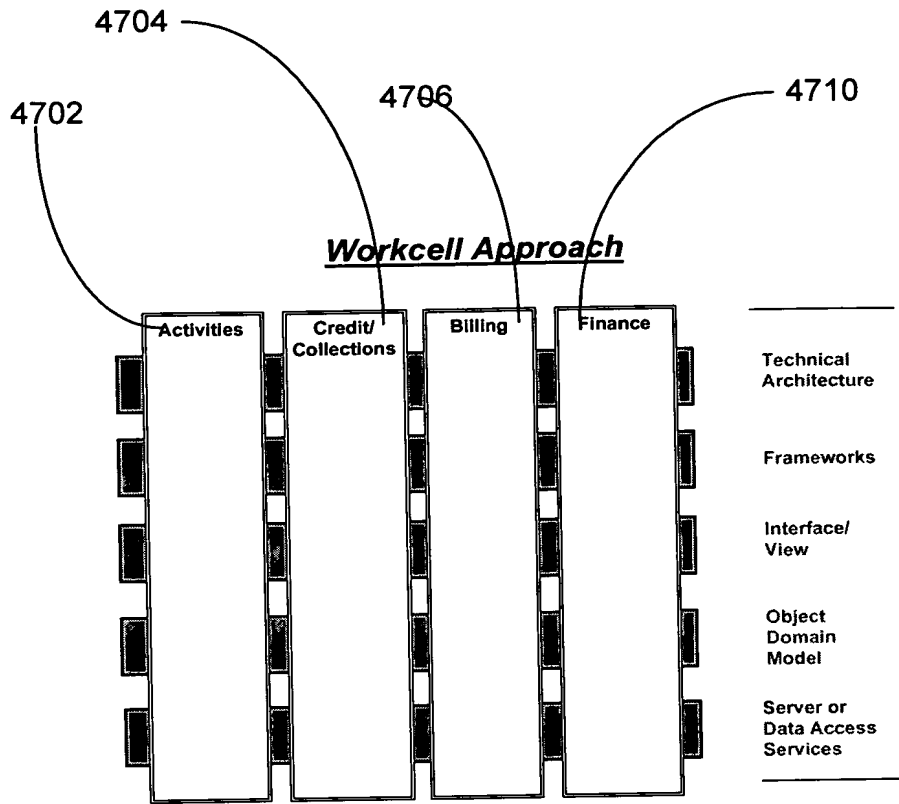


Figure 47

4800

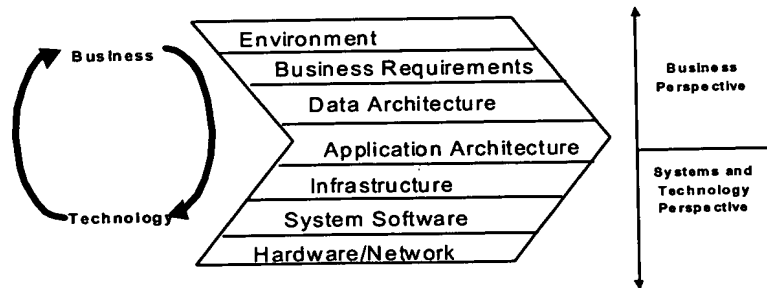


Figure 48

667220-4992850

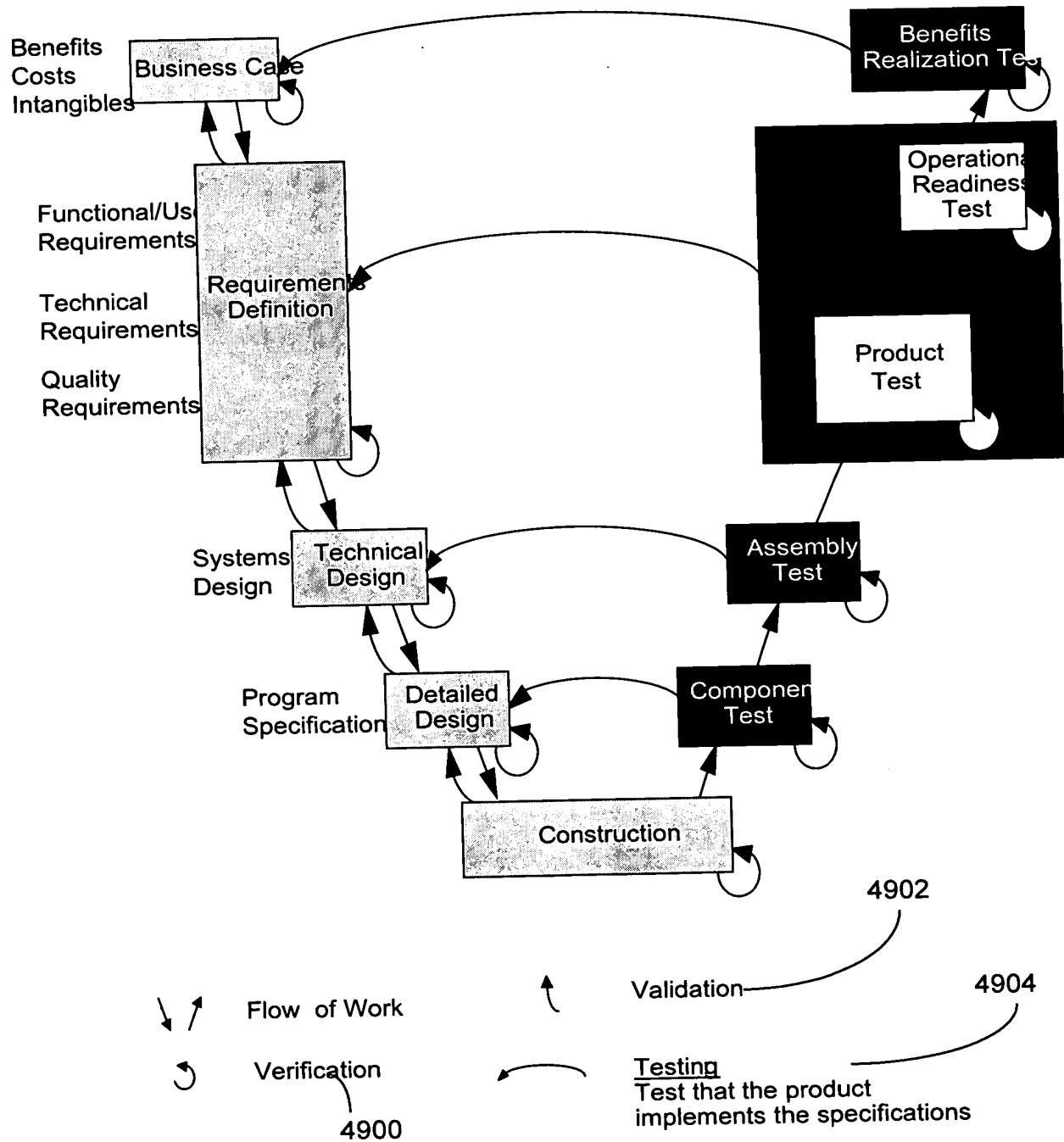


Figure 49

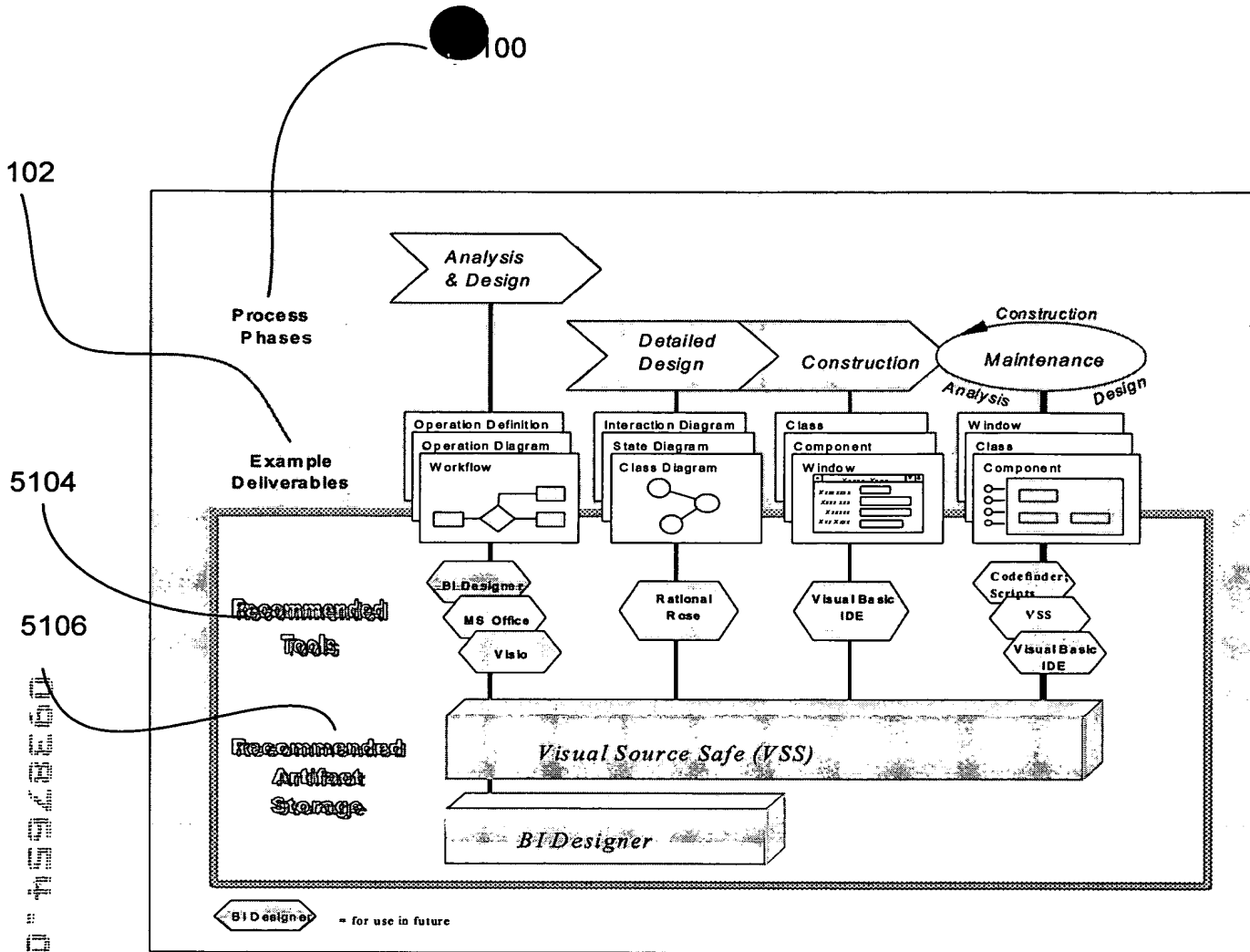


Figure 51

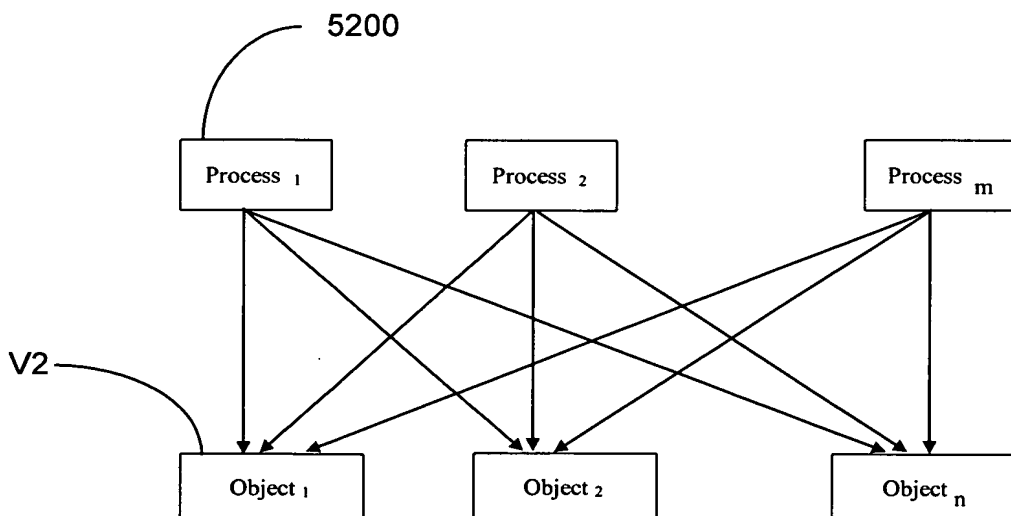


Figure 52

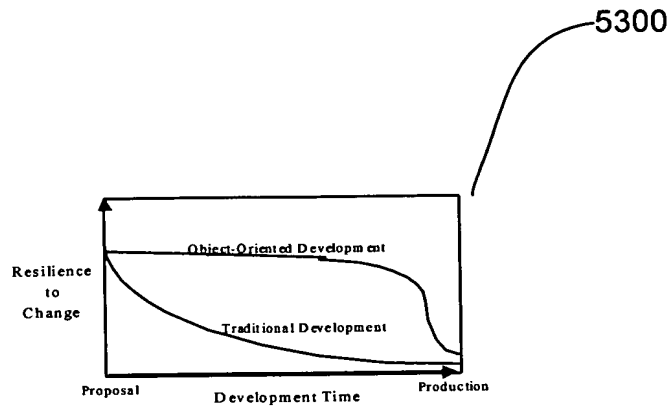


Figure 53

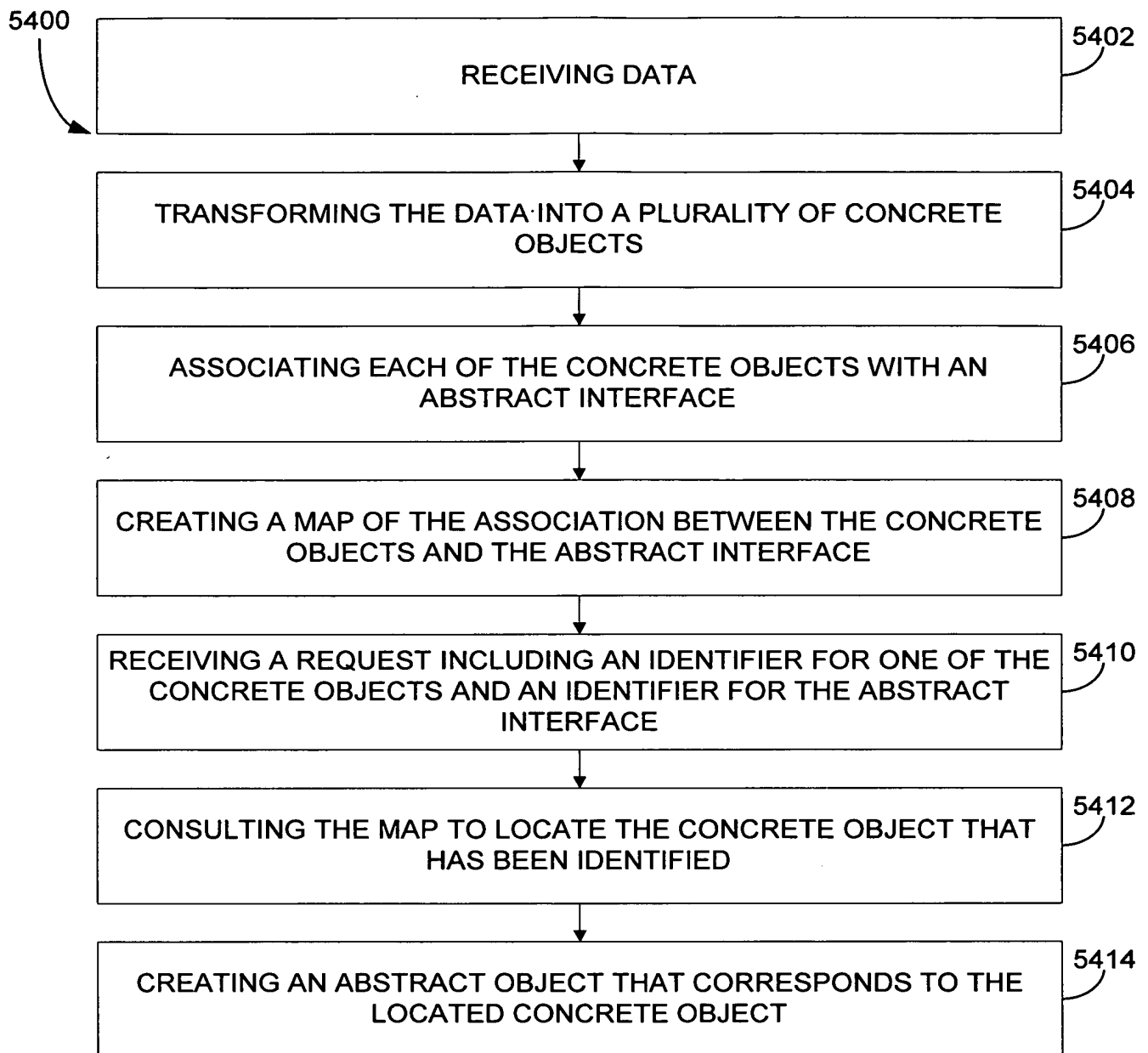


Figure 54

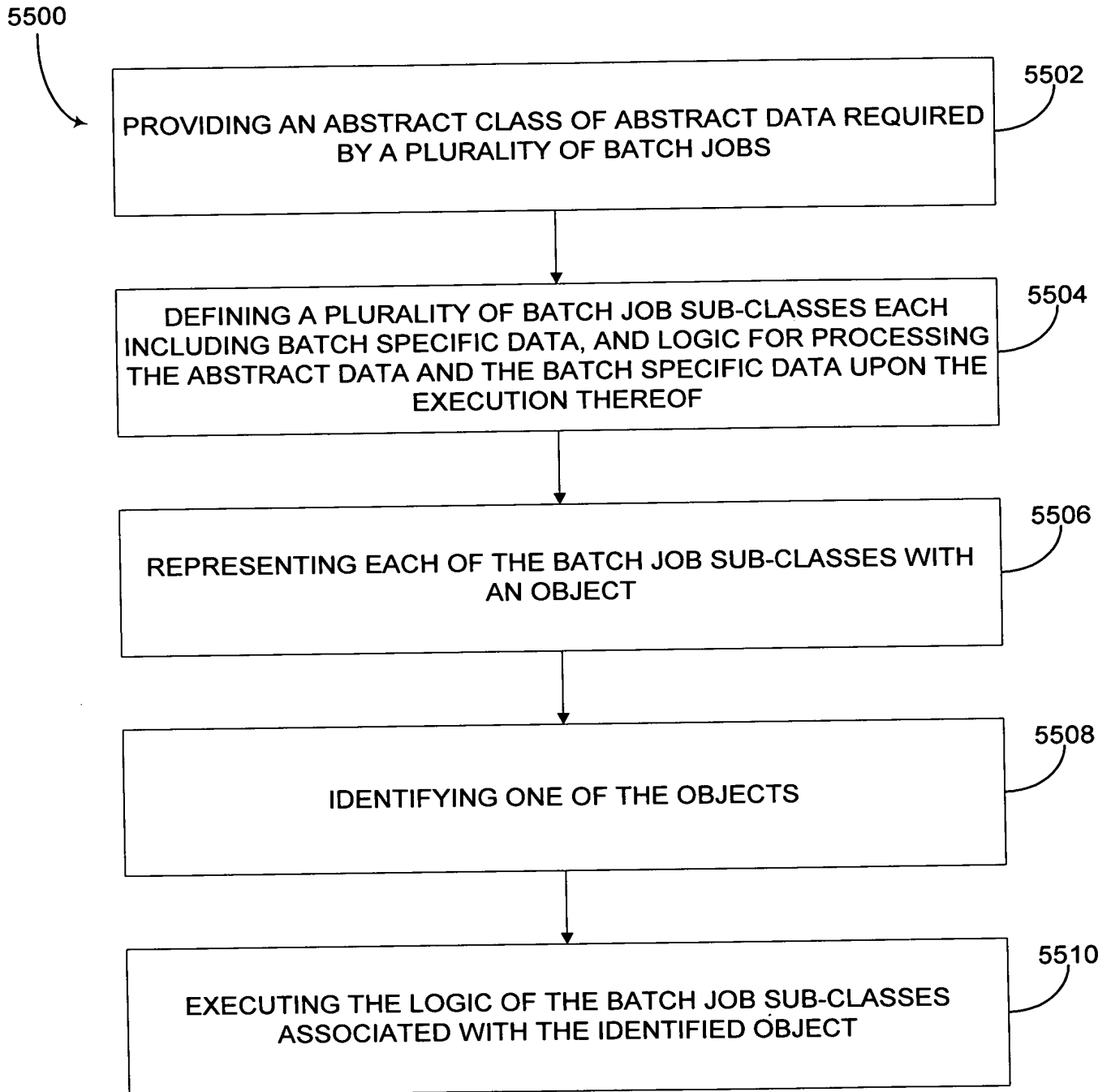


Figure 55

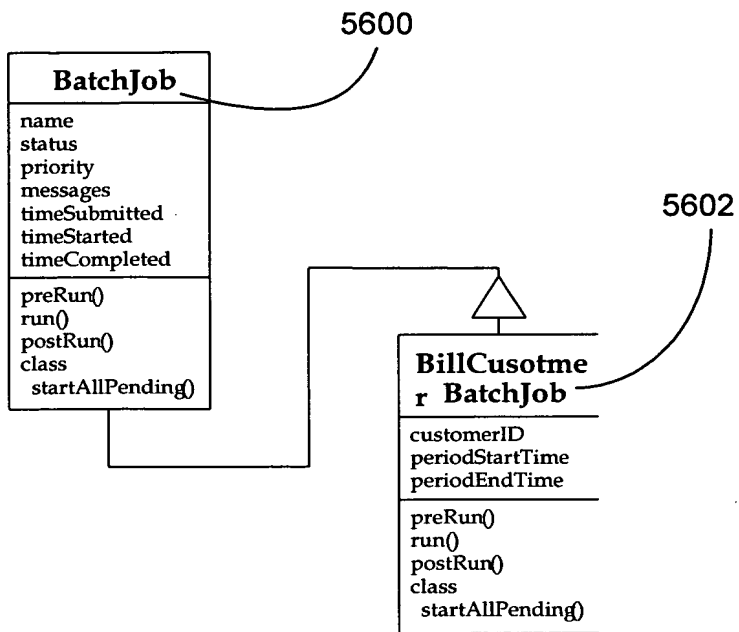


Figure 56

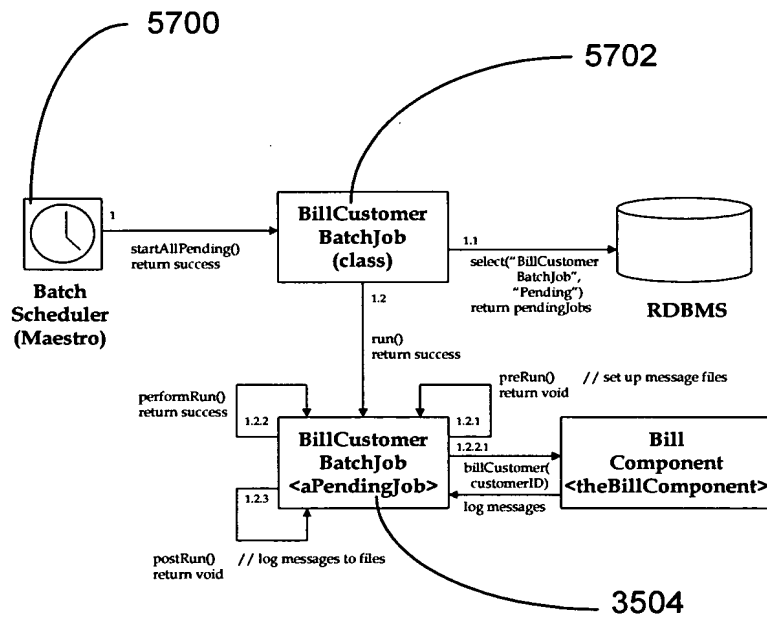


Figure 57

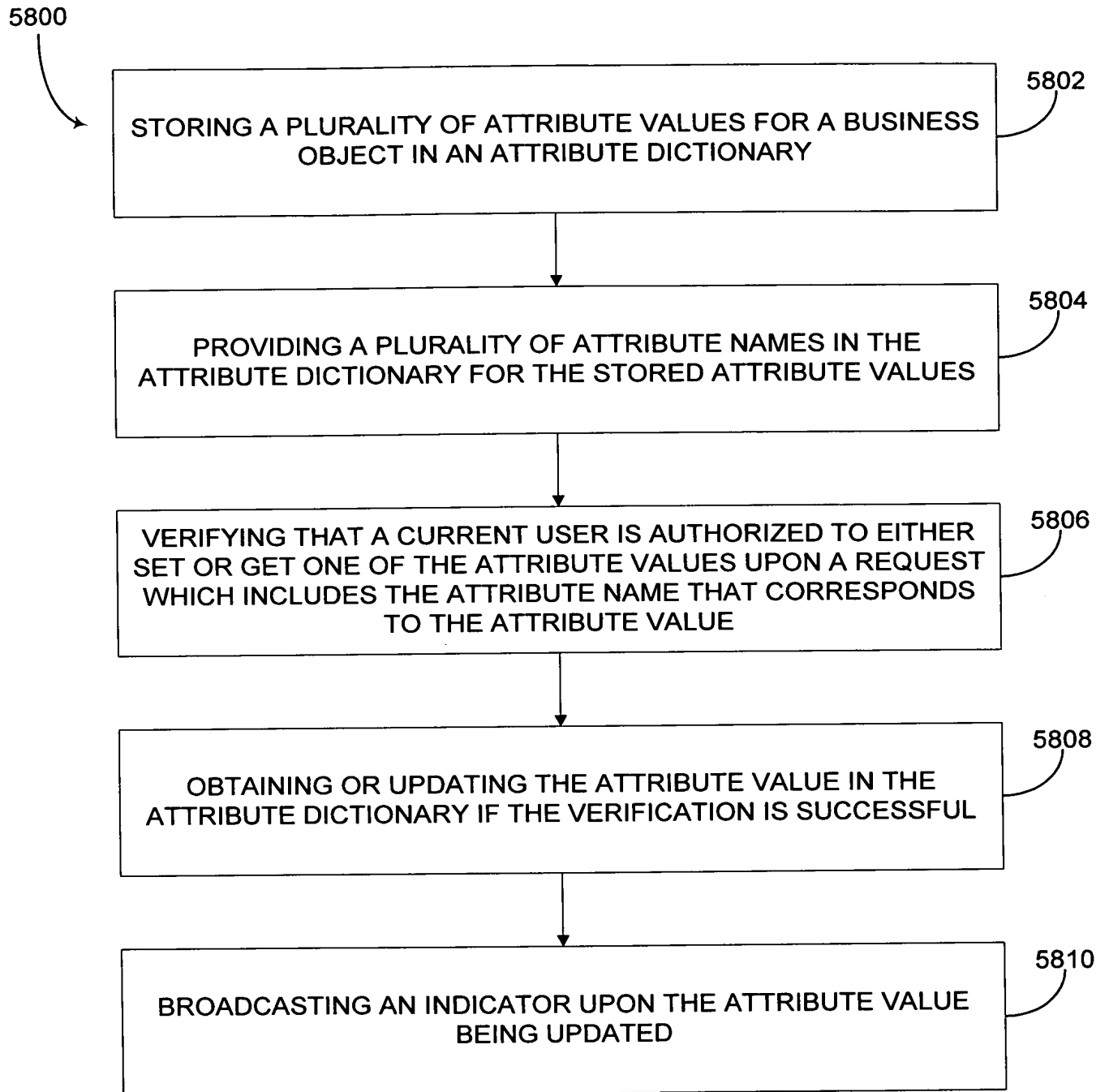


Figure 58

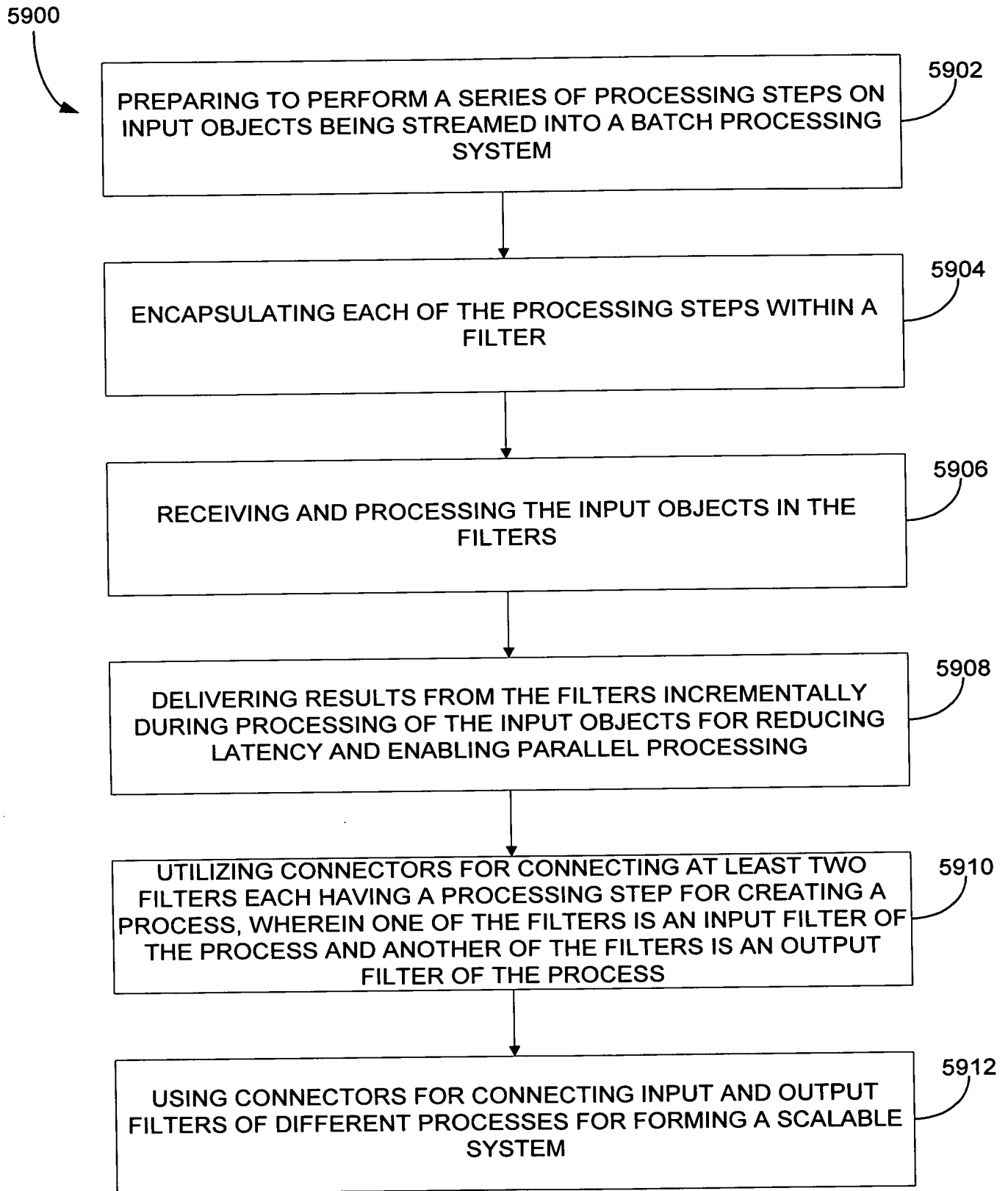


Figure 59

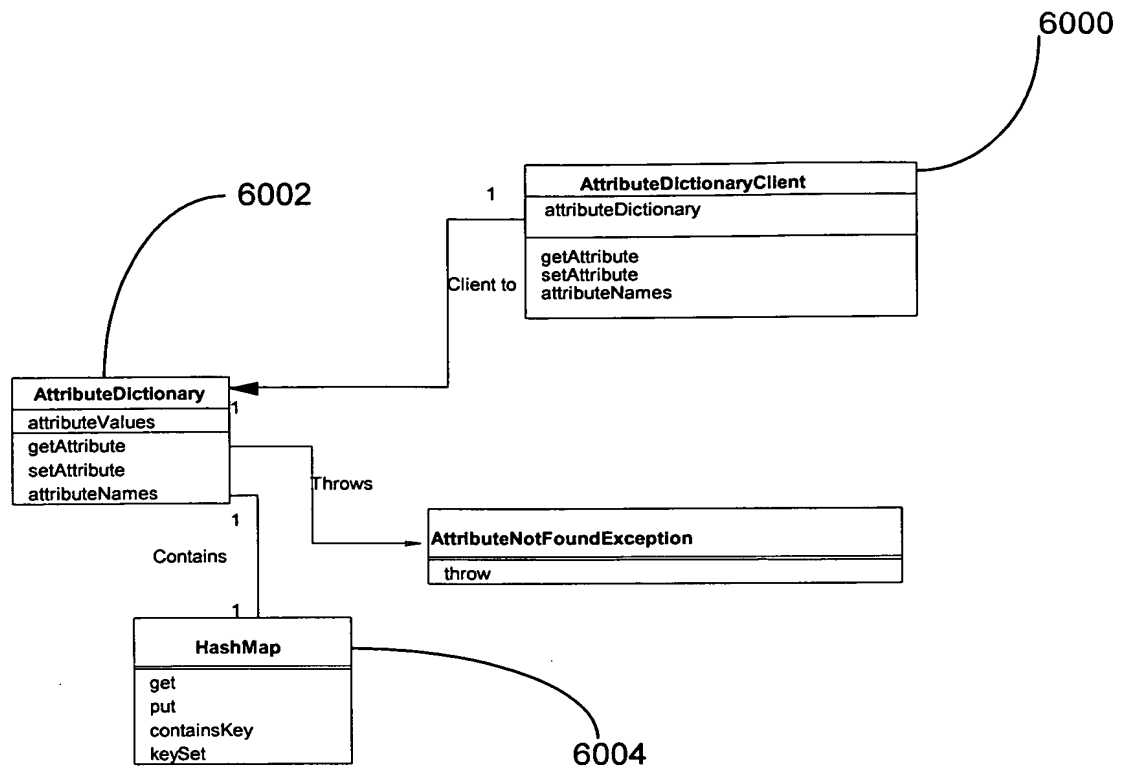


Figure 60

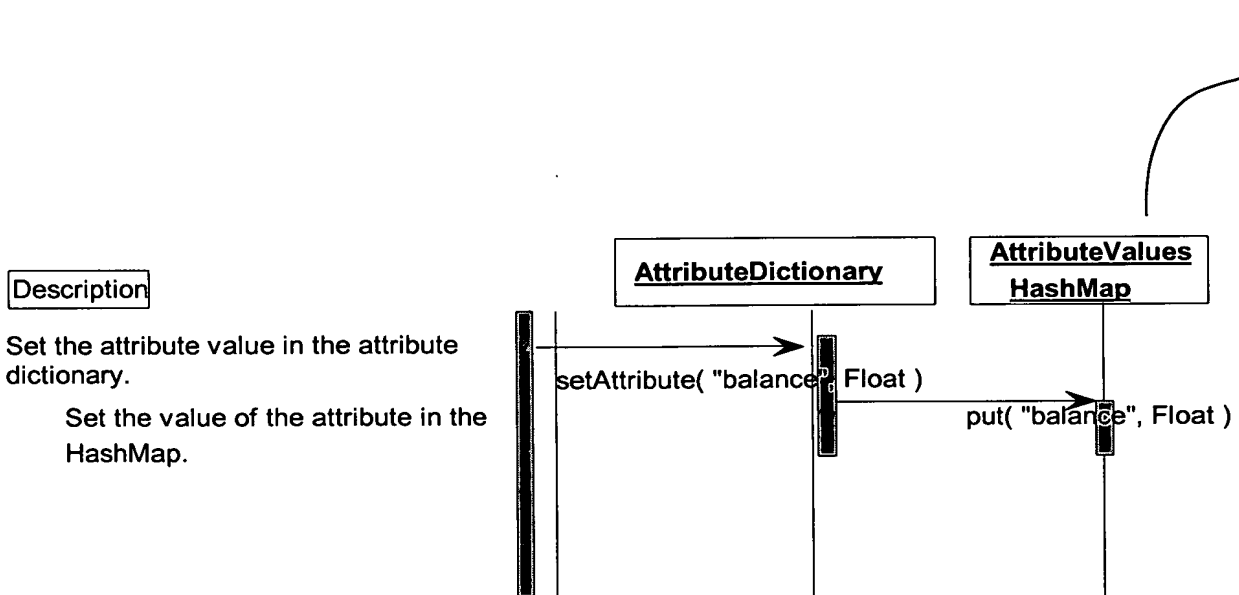


Figure 61

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06T230-45978260

Description

Ask the Attribute Dictionary for the value of the specified attribute name.

Ask the HashMap if an entry for the specified key exists.

In this scenario, the attribute does not exist, so throw an Exception.

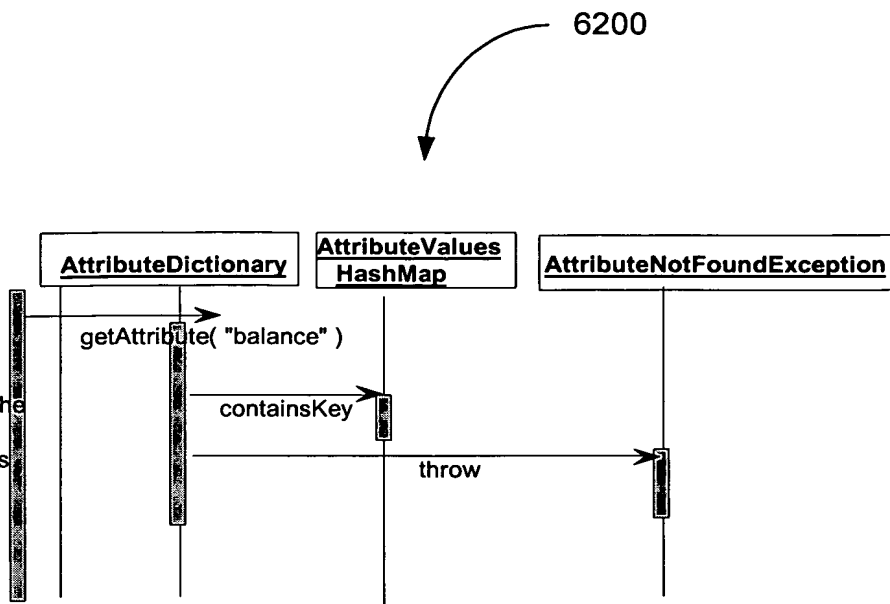


Figure 62

Description

Ask the Attribute Dictionary for the list of populated attributes.

Attribute Dictionary requests all keys from the HashMap and returns them.

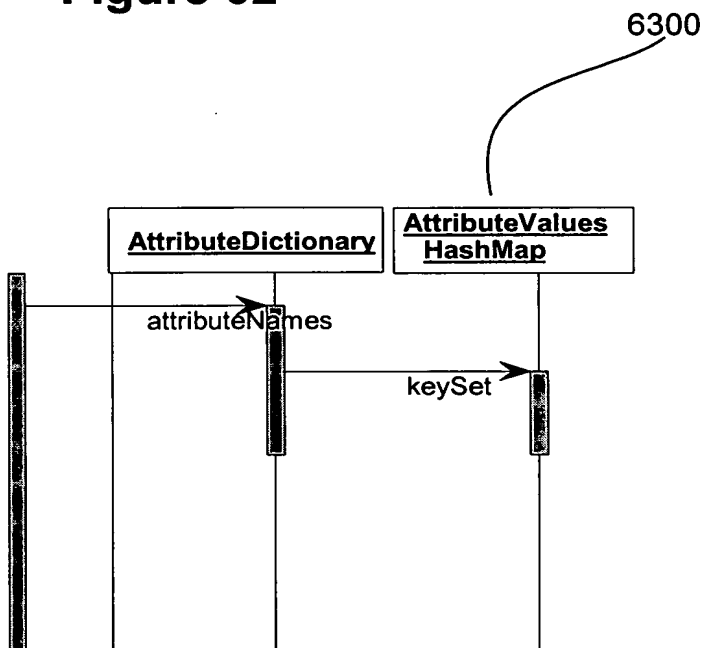


Figure 63

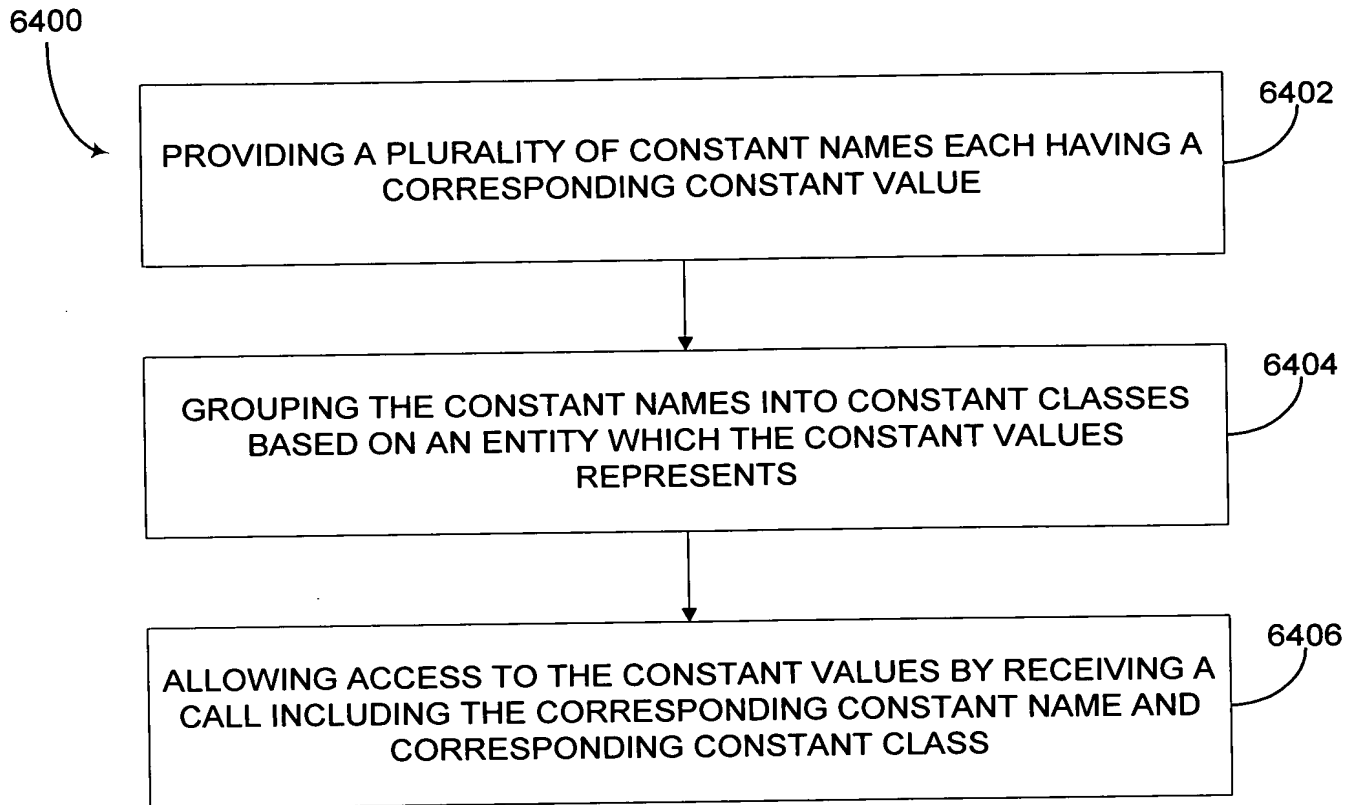


Figure 64

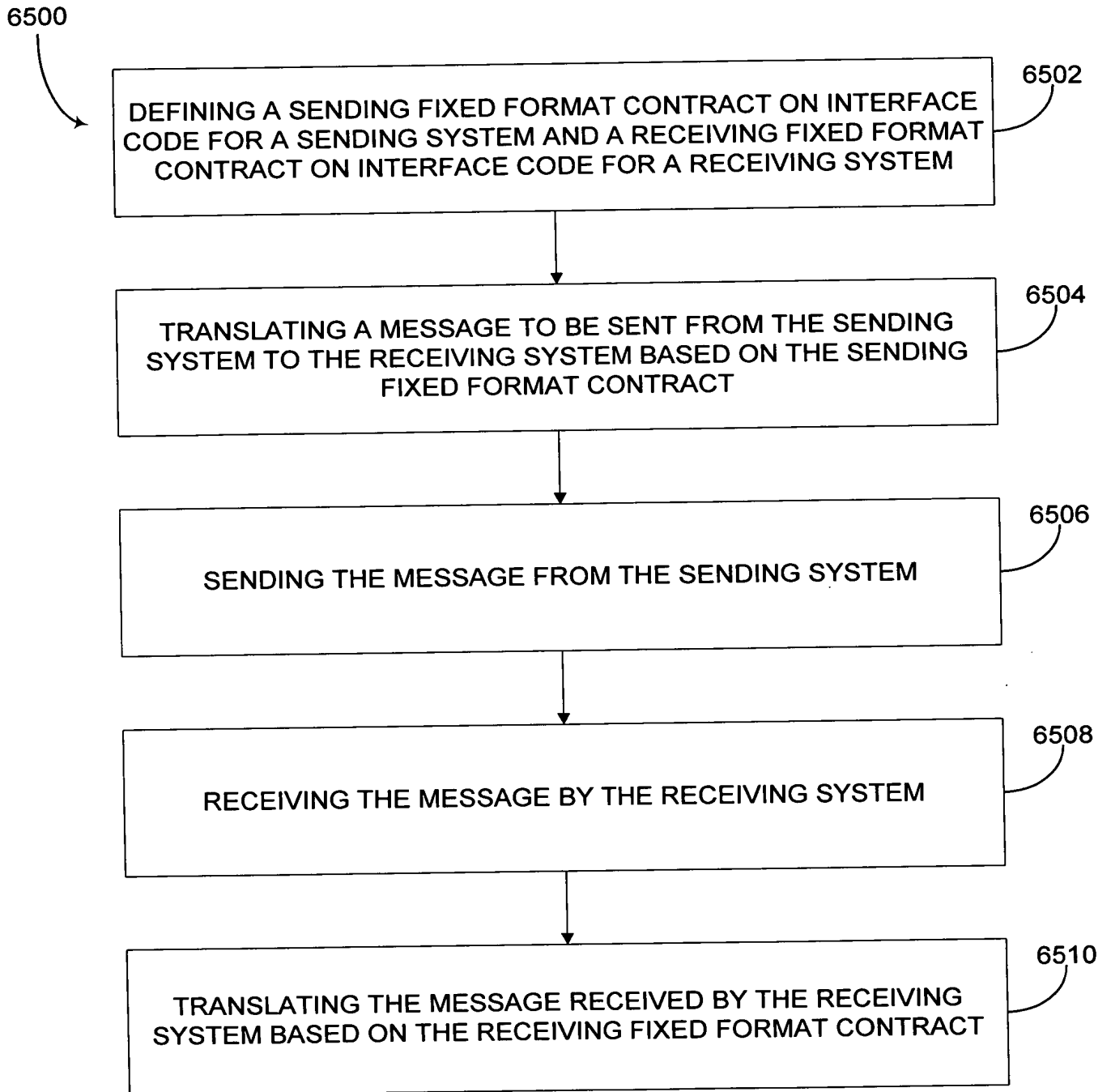


Figure 65

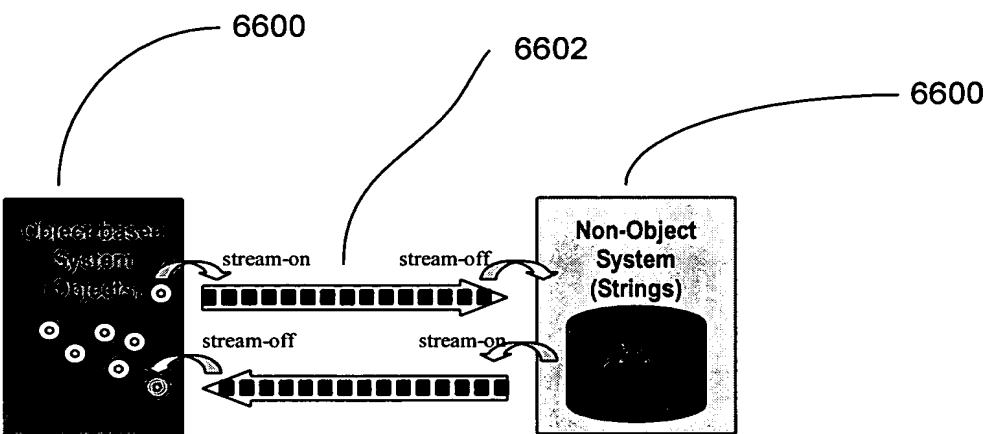


Figure 66

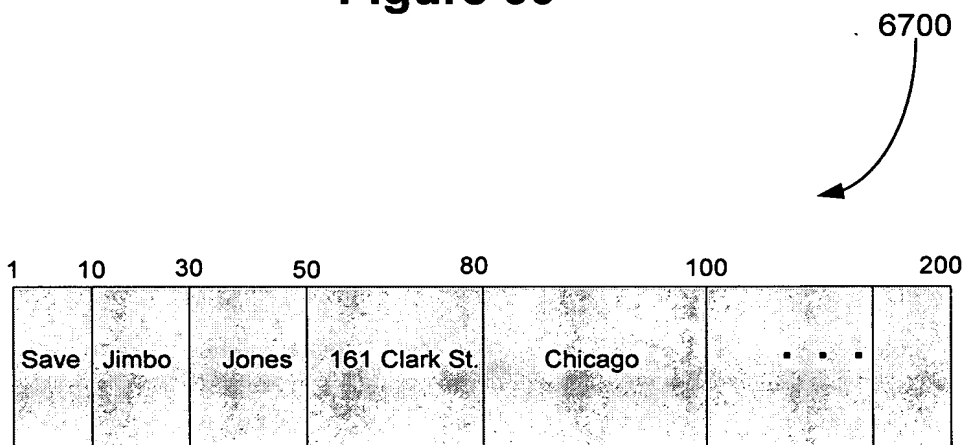


Figure 67

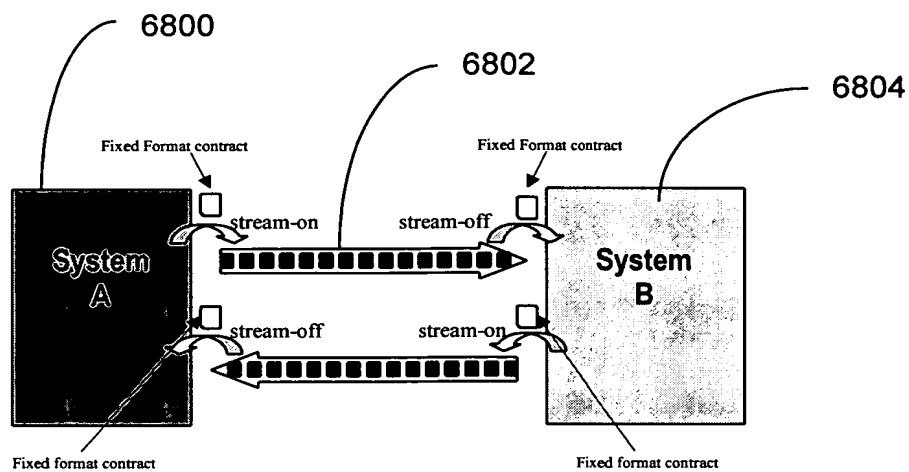


Figure 68

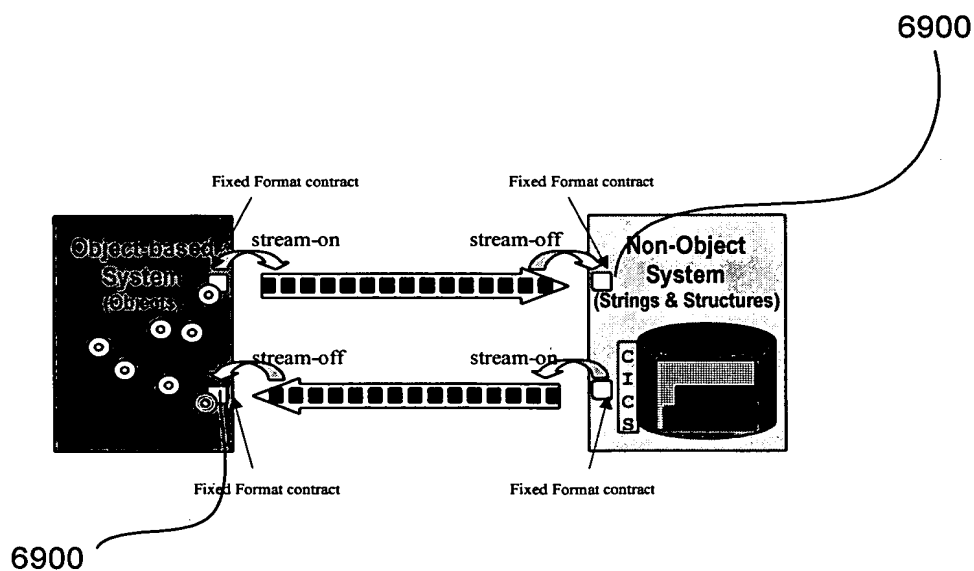


Figure 69

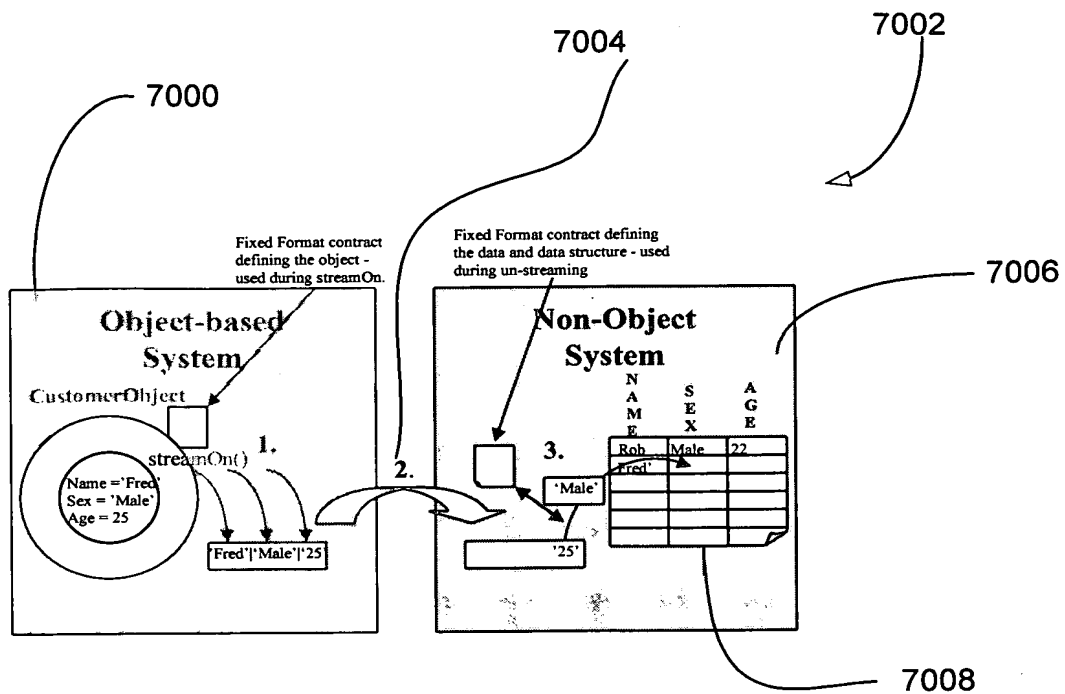


Figure 70

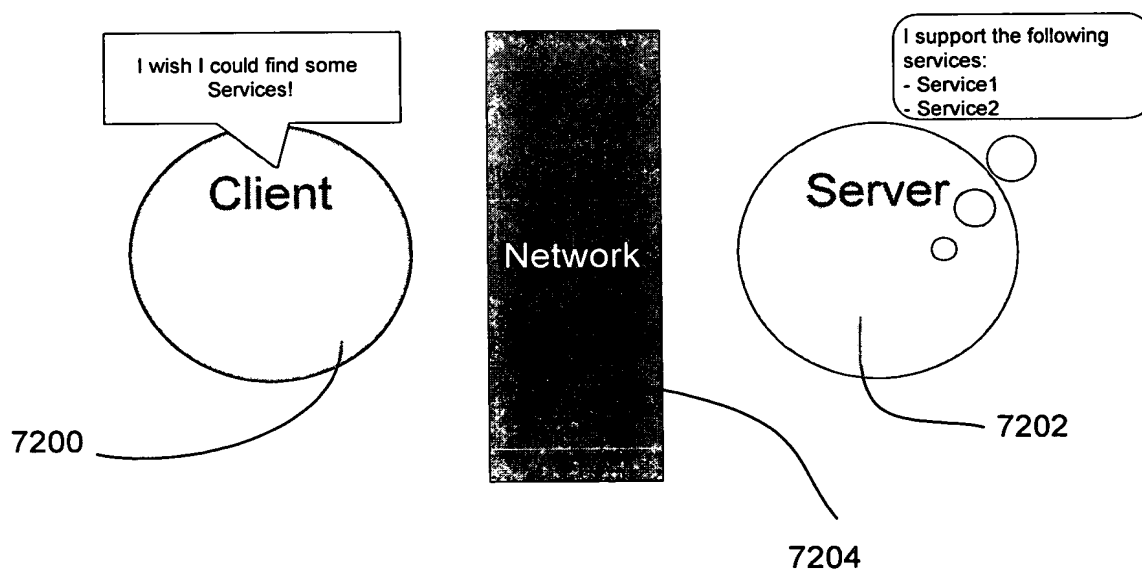


Figure 72

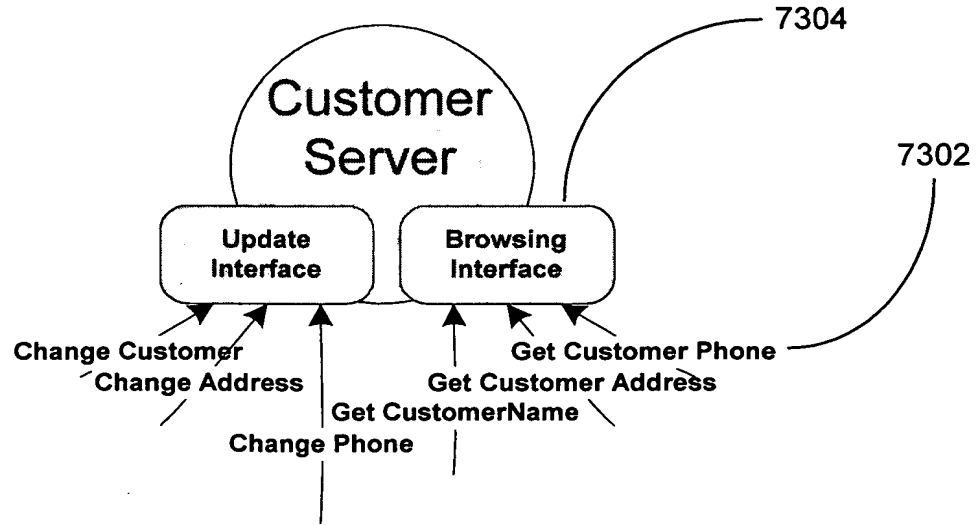


Figure 73

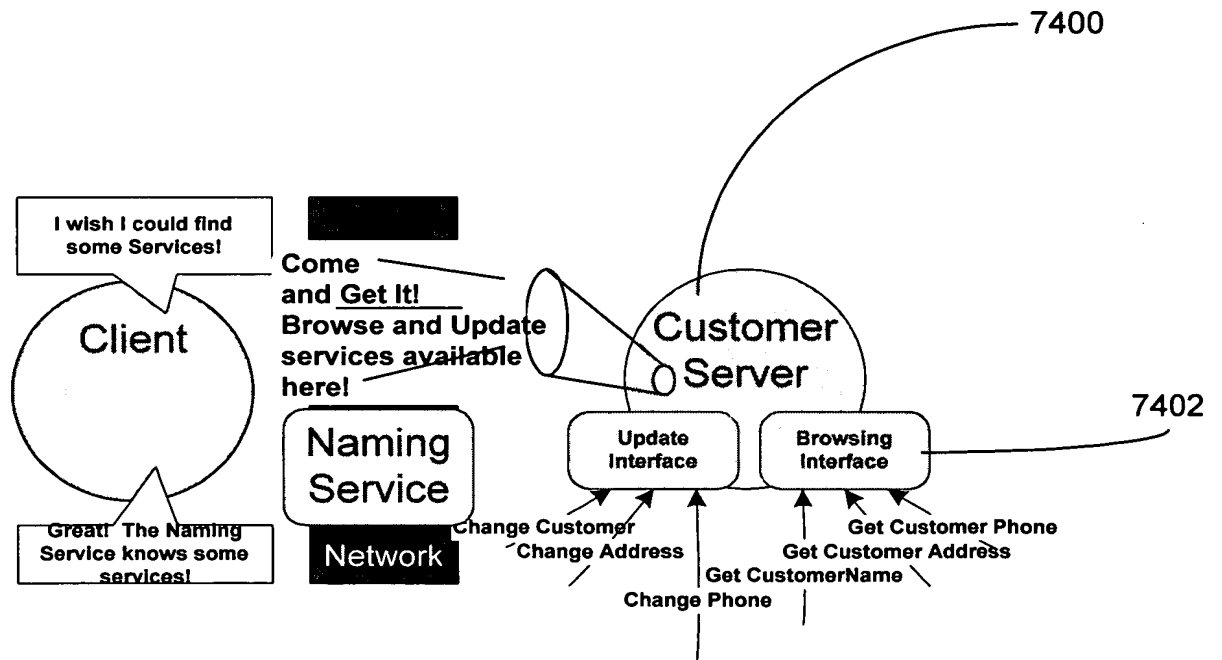


Figure 74

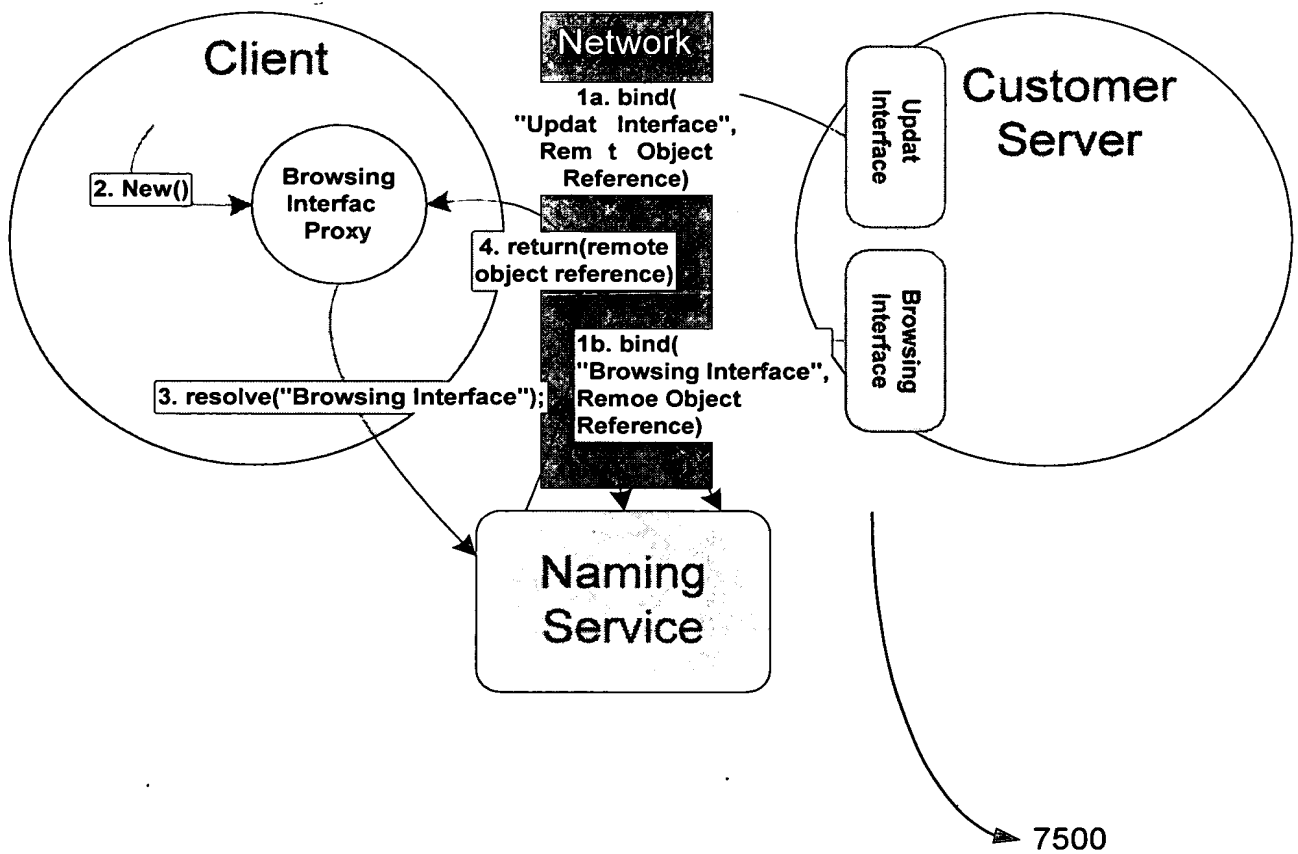


Figure 75

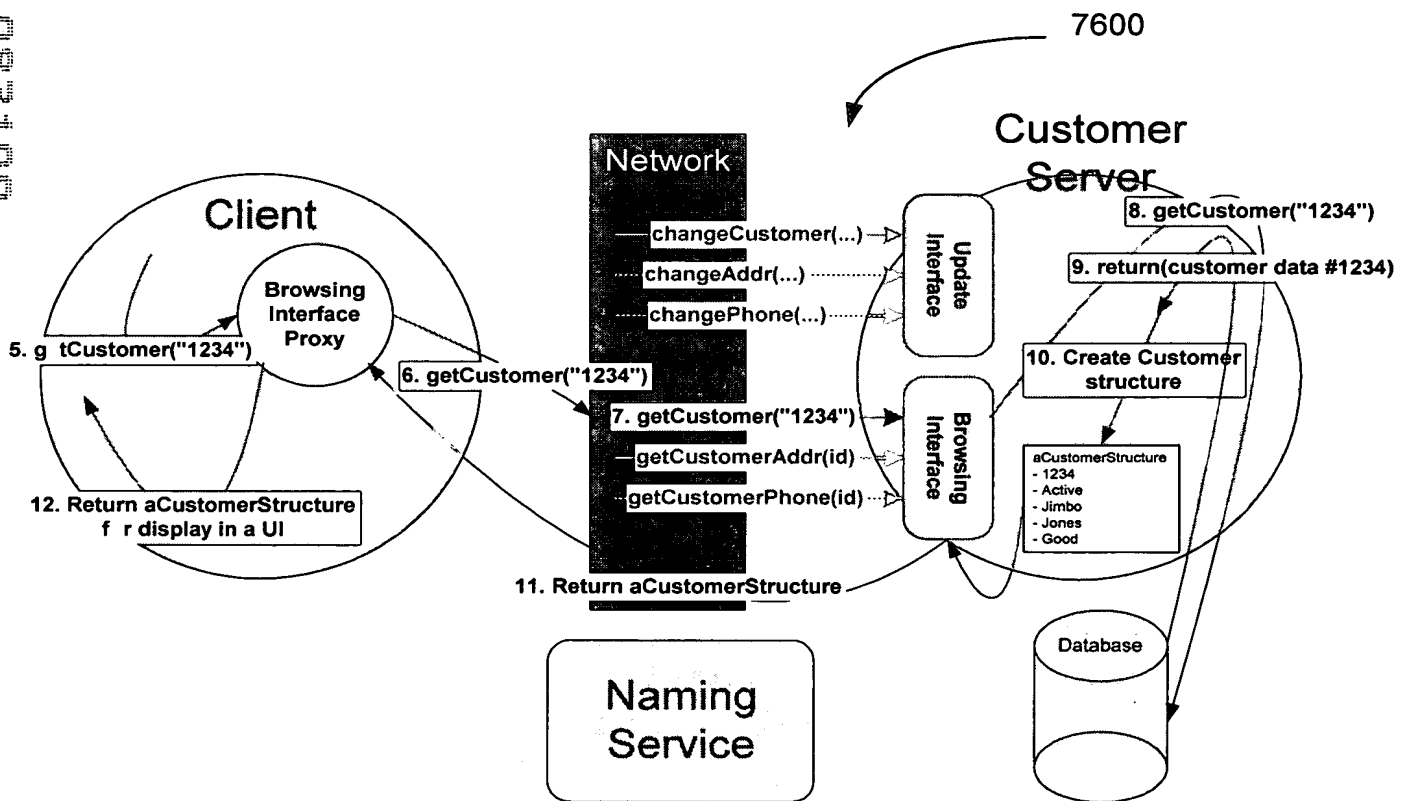


Figure 76

7700

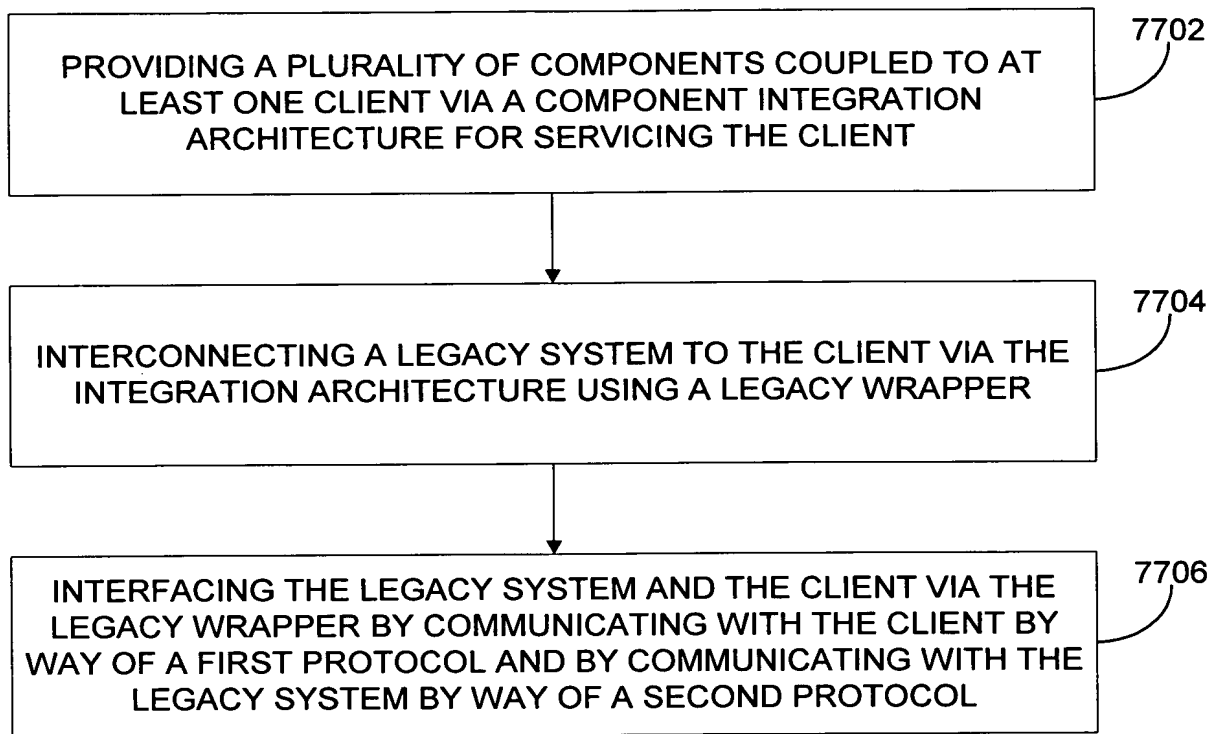


Figure 77

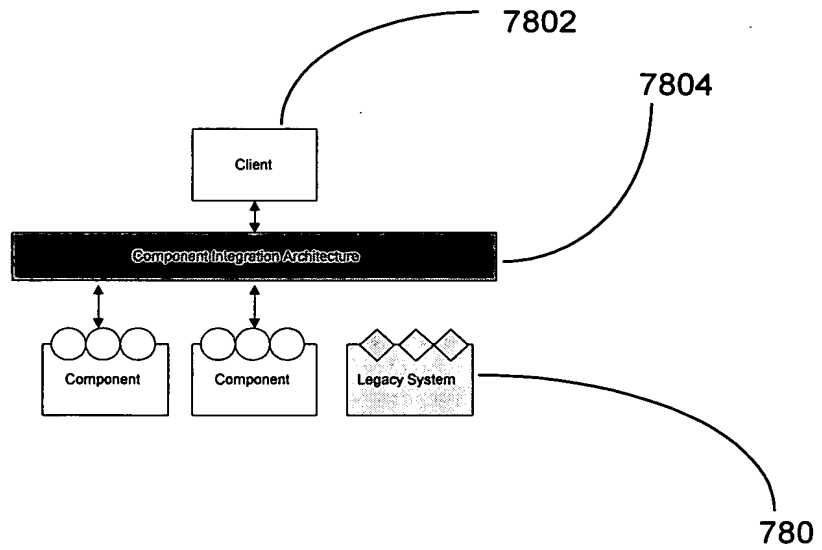


Figure 78

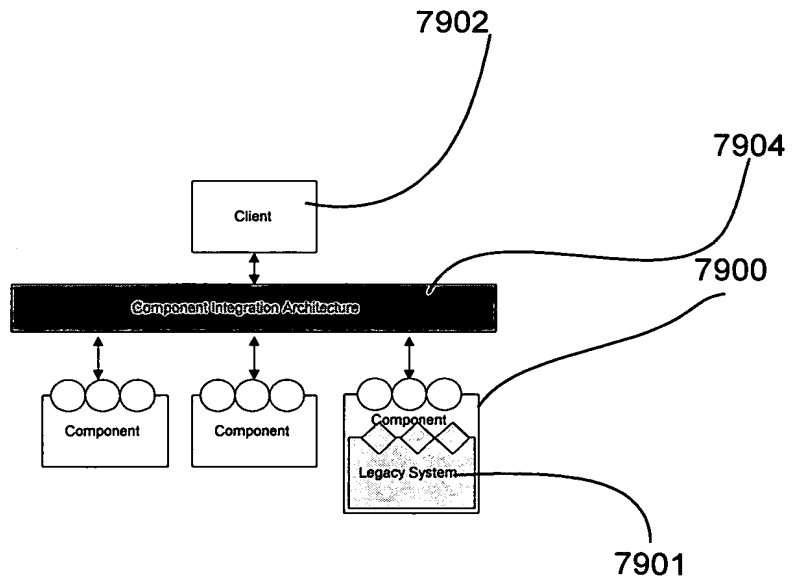


Figure 79

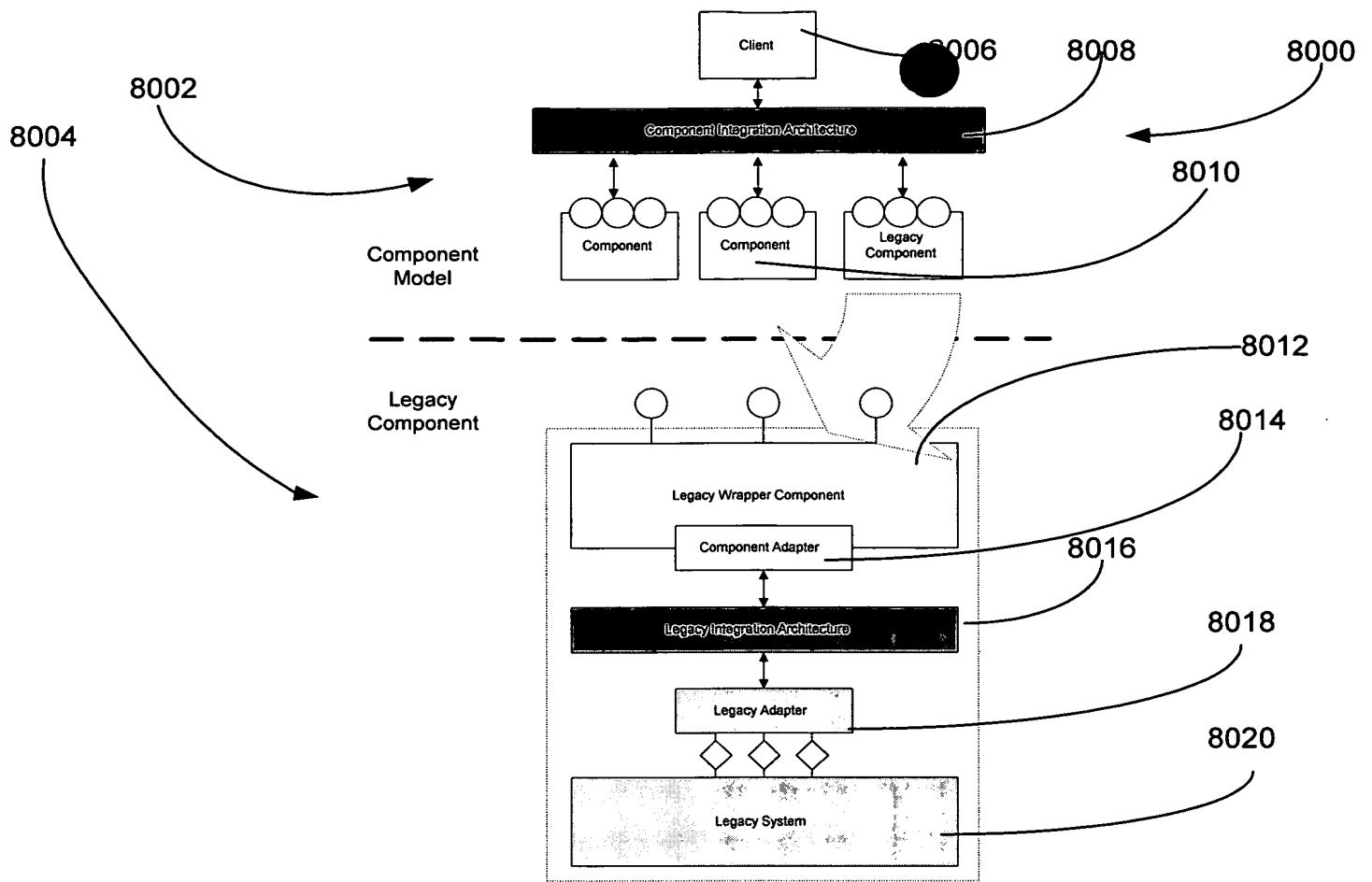


Figure 80

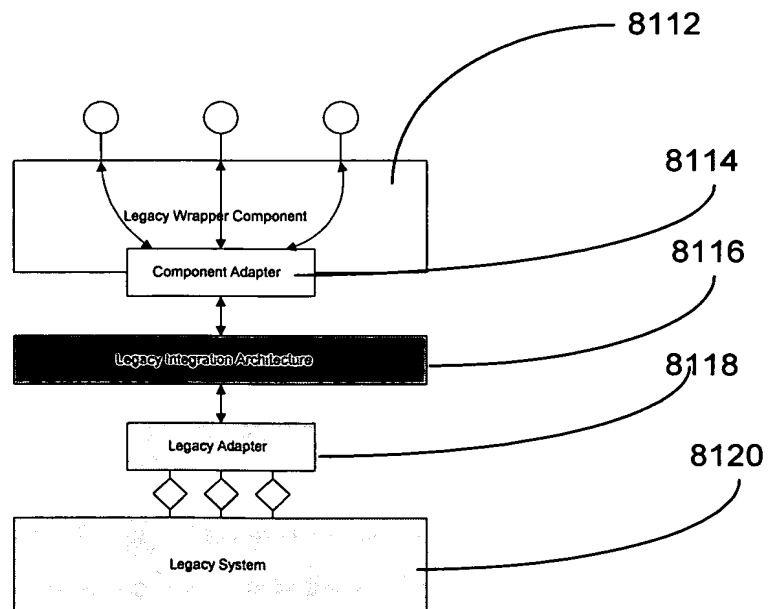


Figure 81

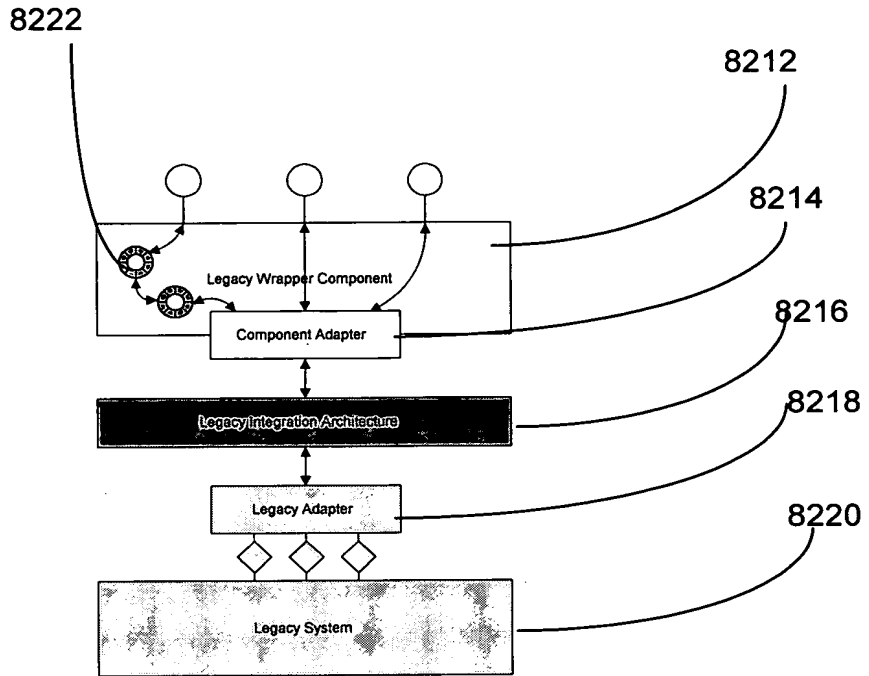


Figure 82

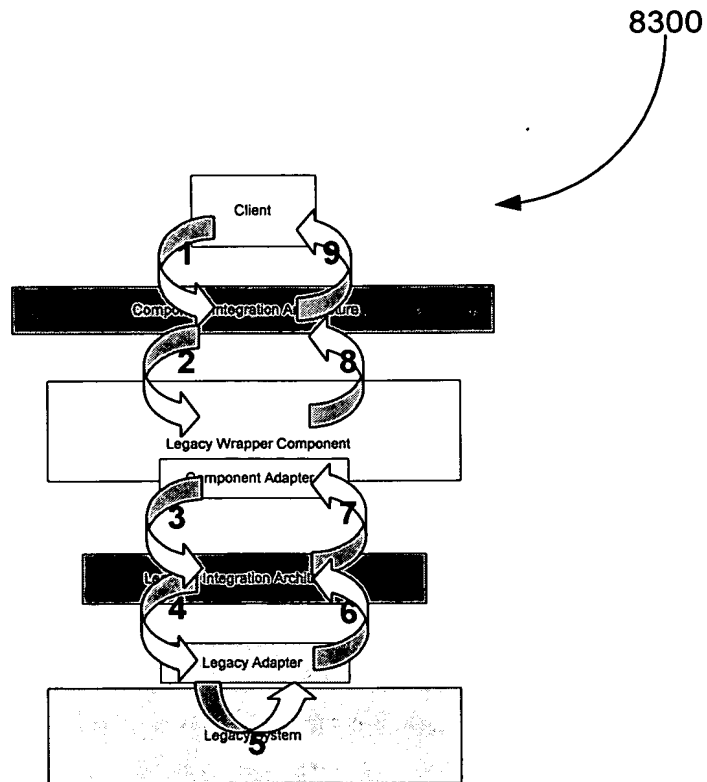


Figure 83

667230 19940926

8400

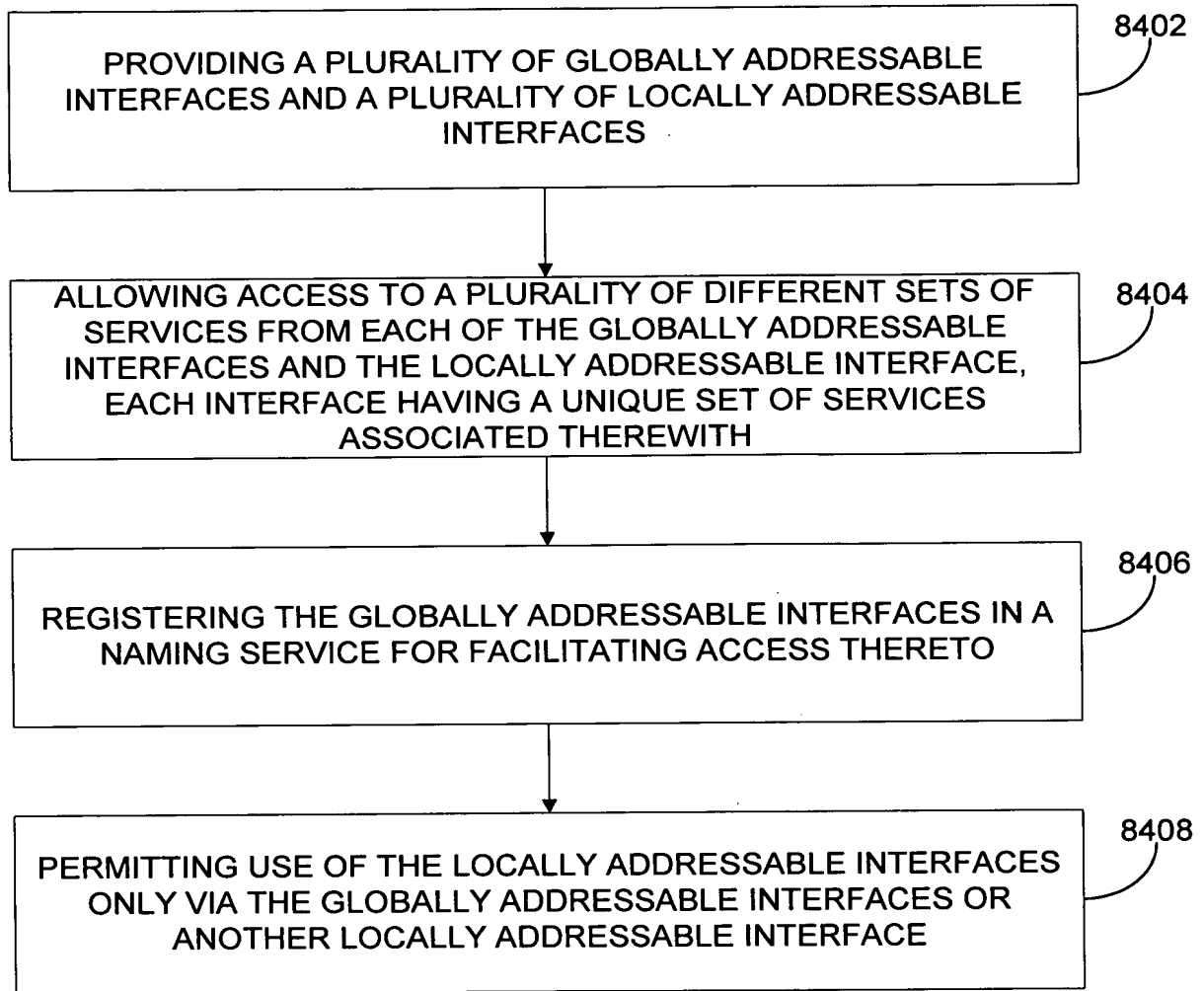


Figure 84

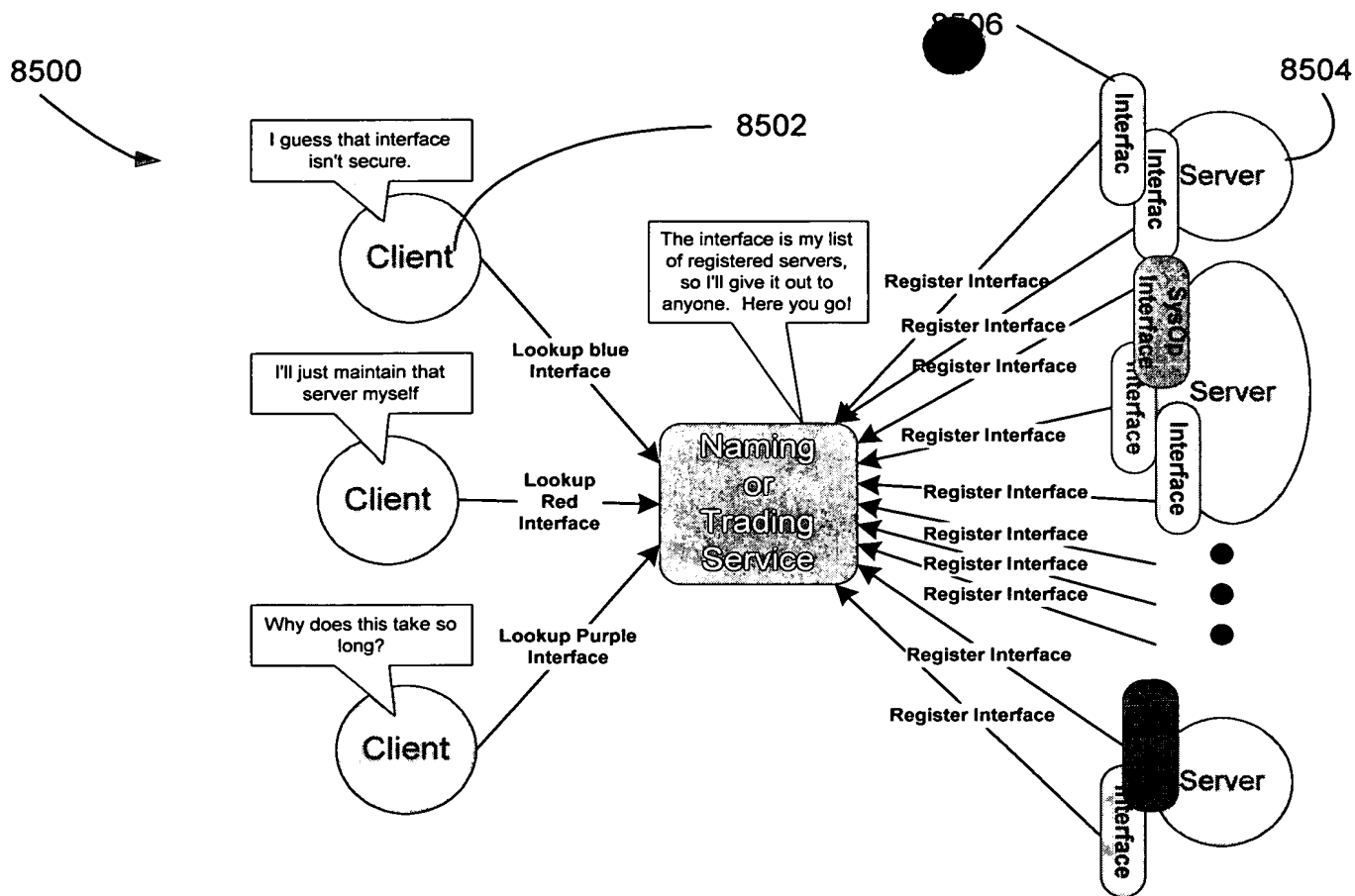


Figure 85

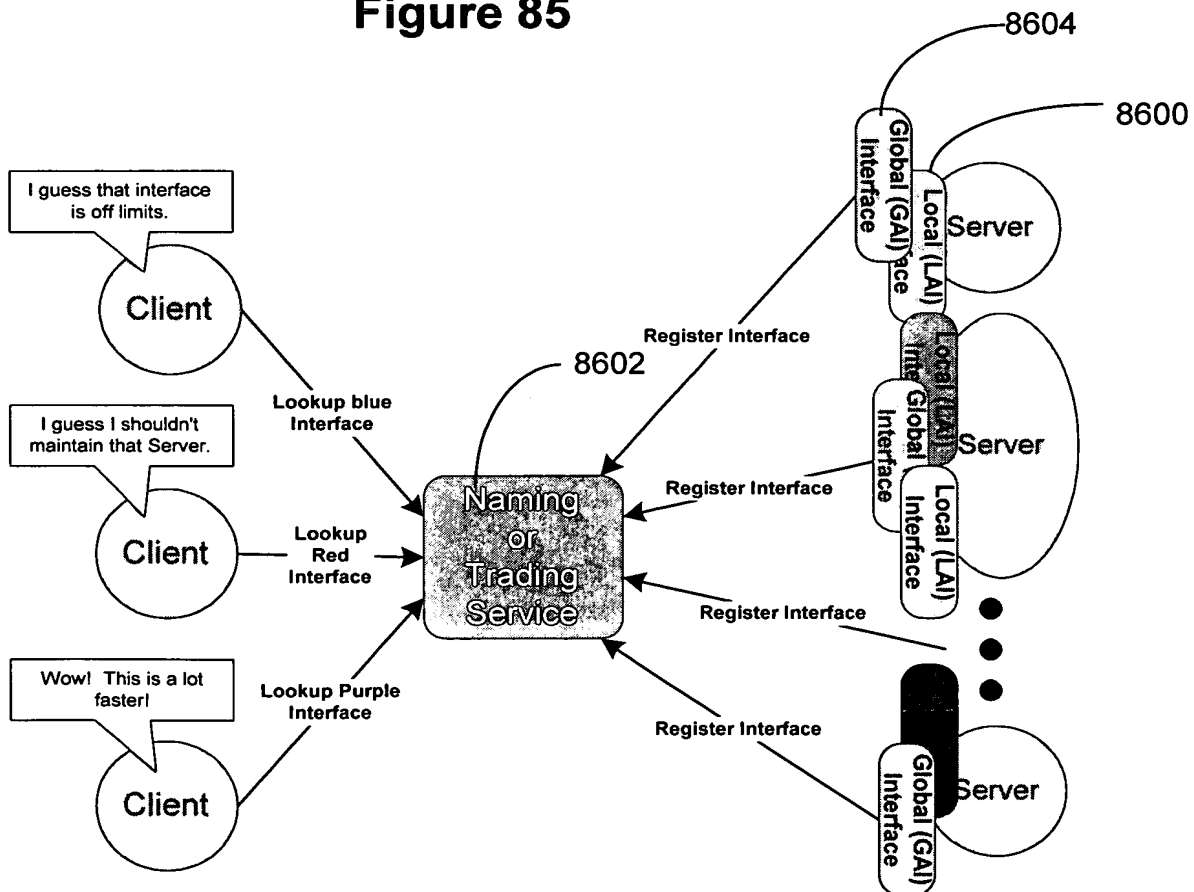


Figure 86

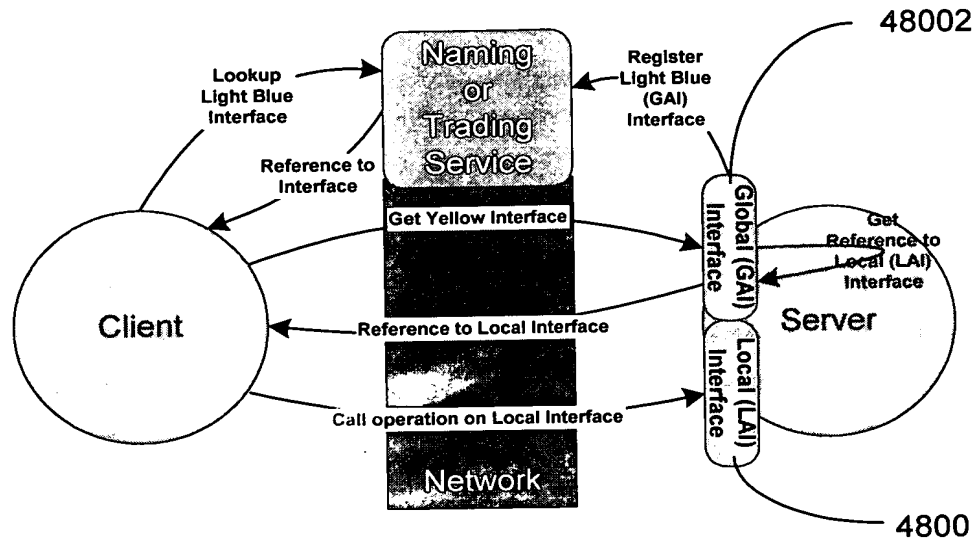


Figure 87

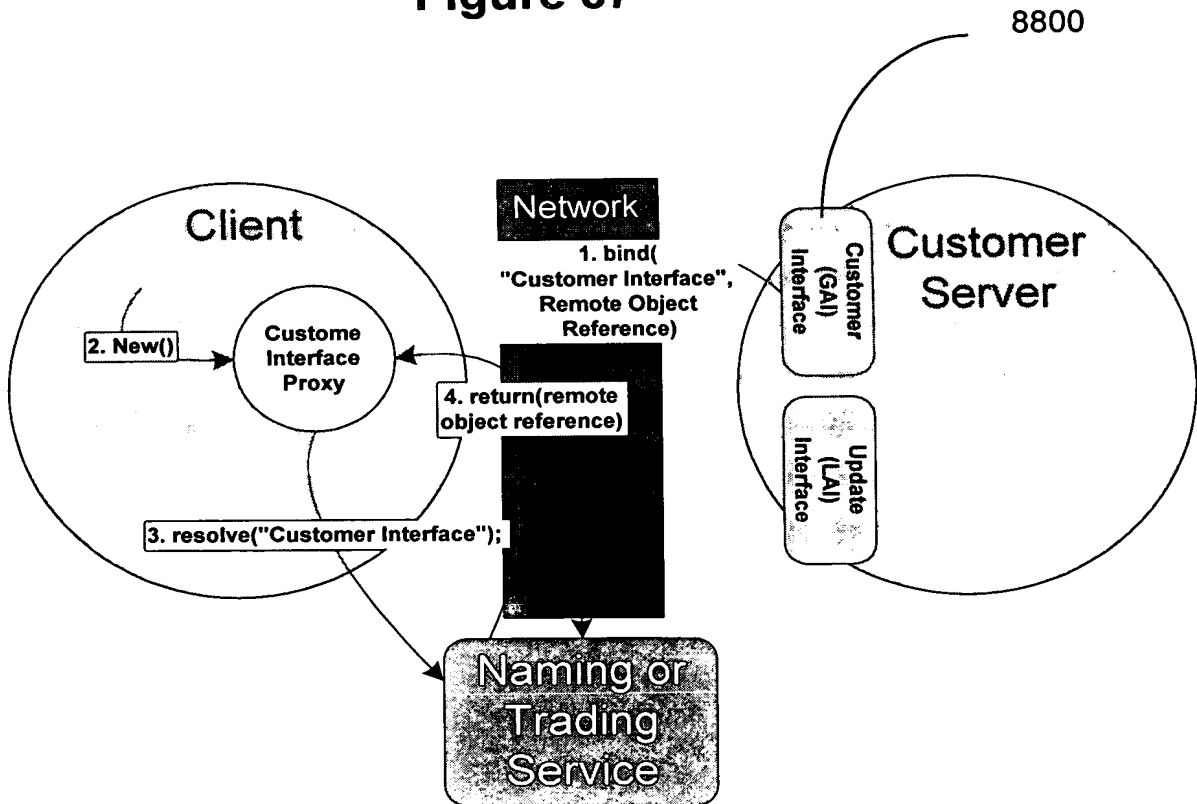


Figure 88

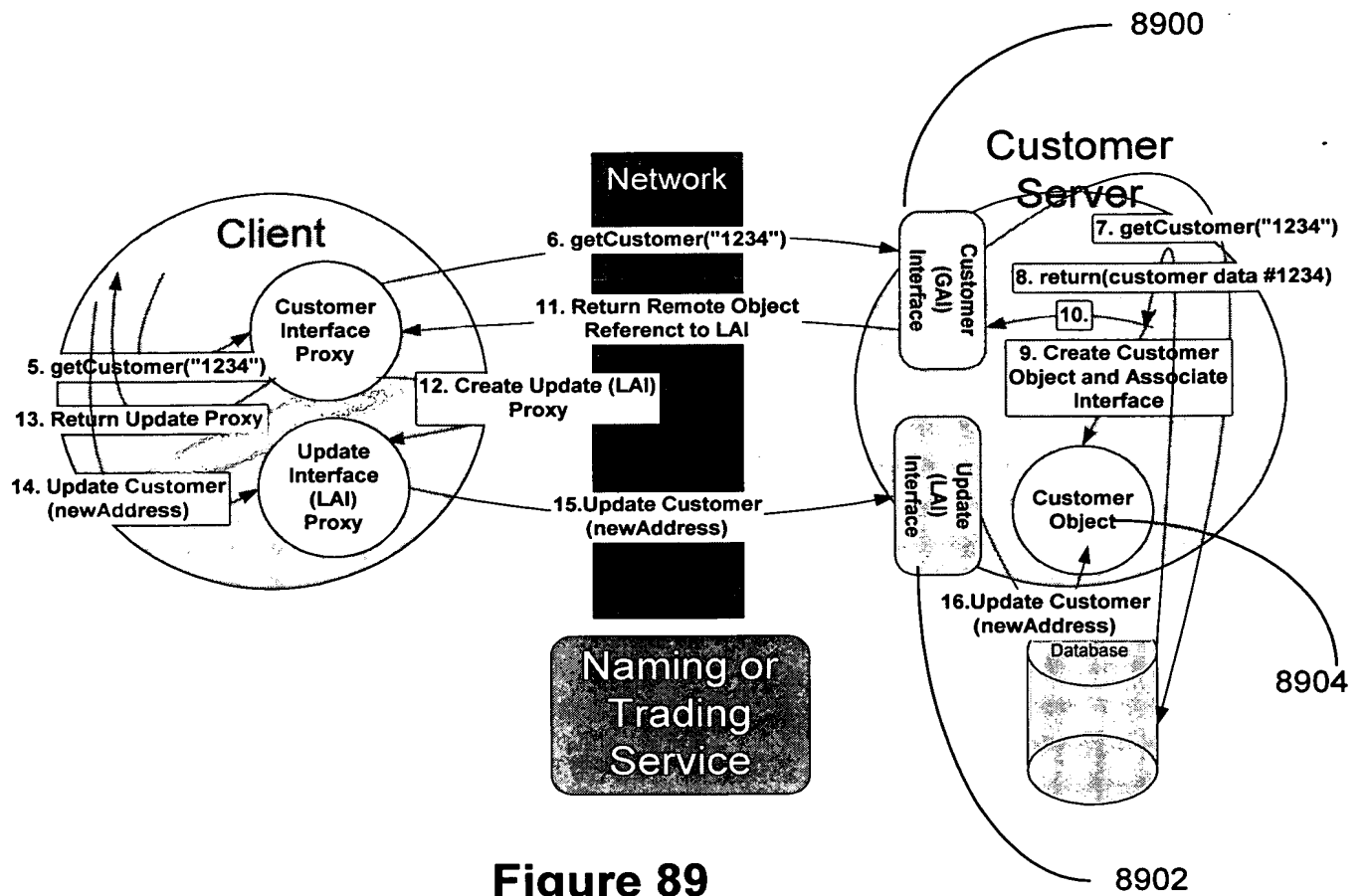


Figure 89

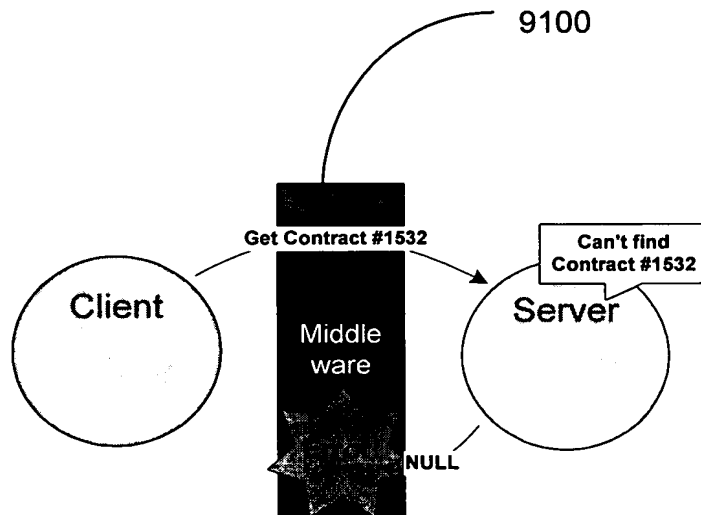


Figure 91

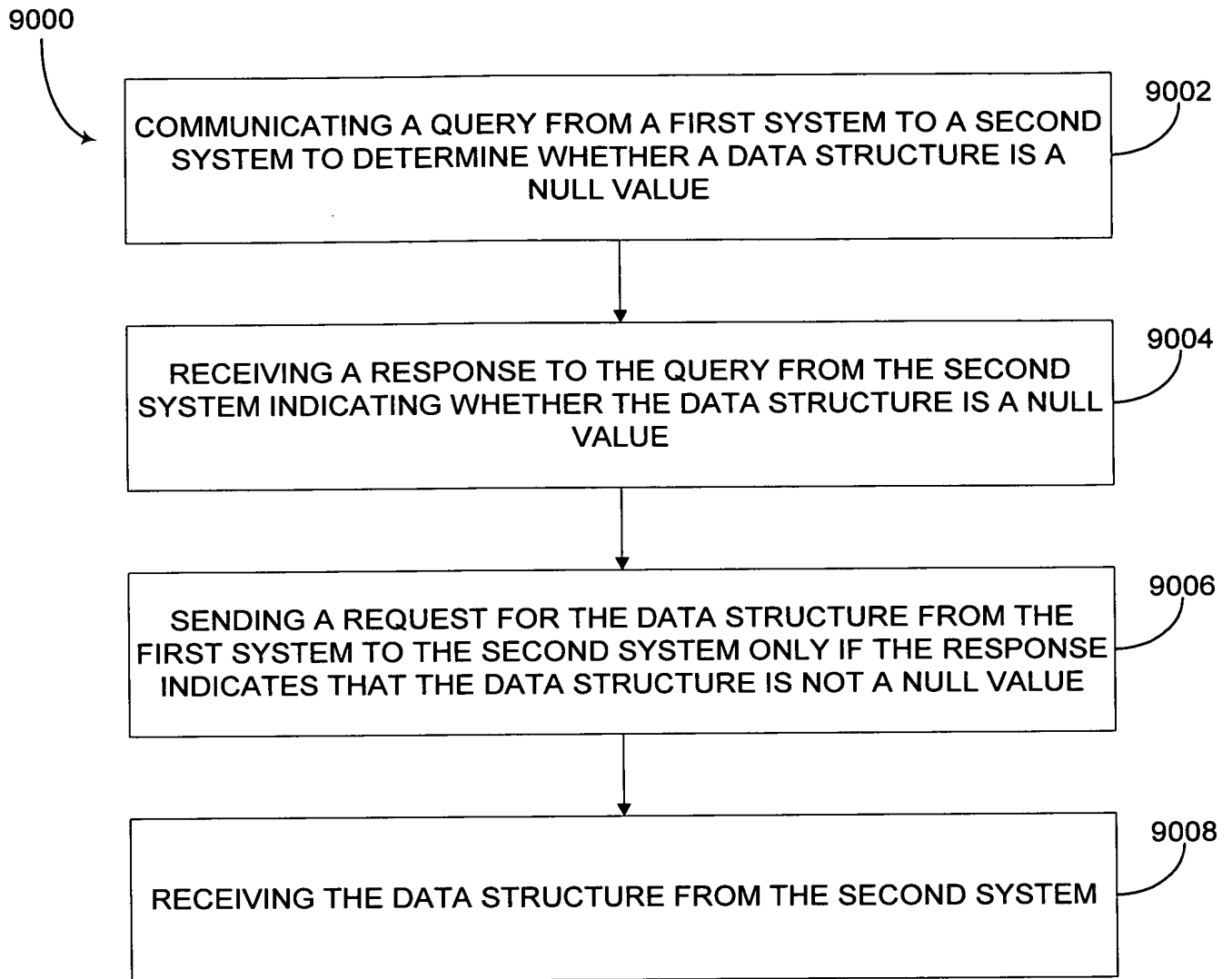


Figure 90

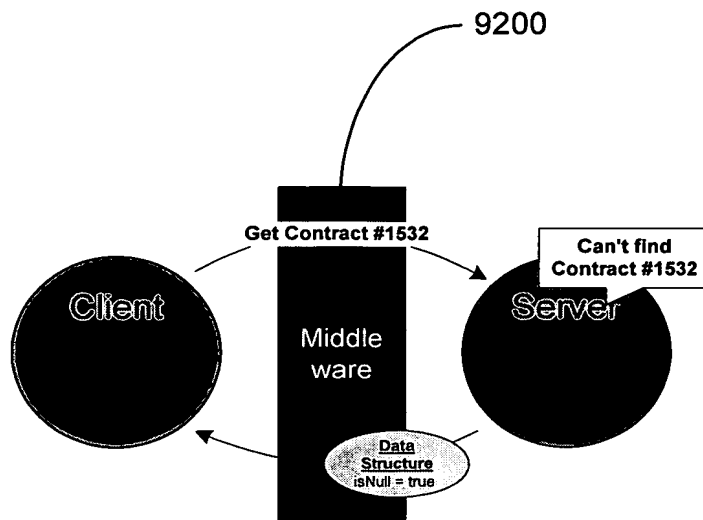


Figure 92

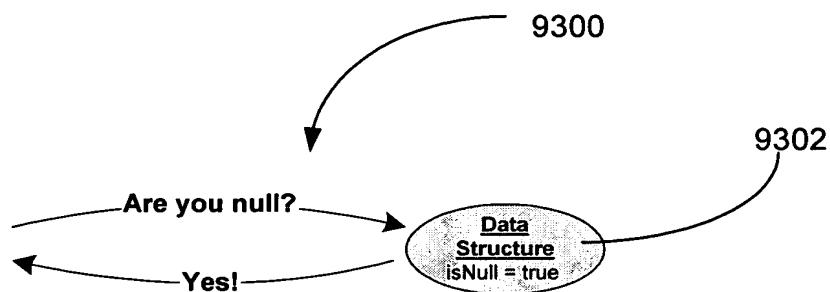


Figure 93

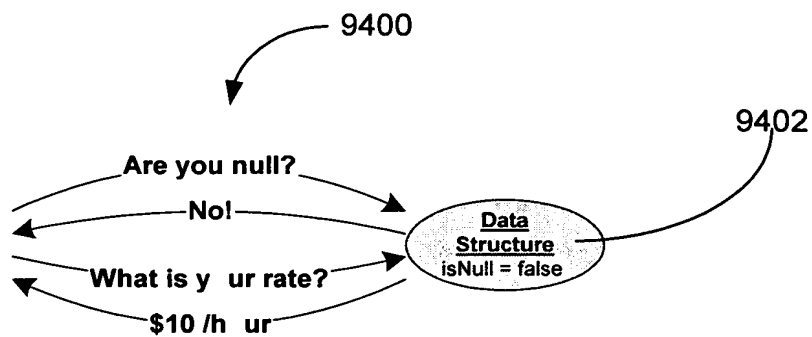


Figure 94

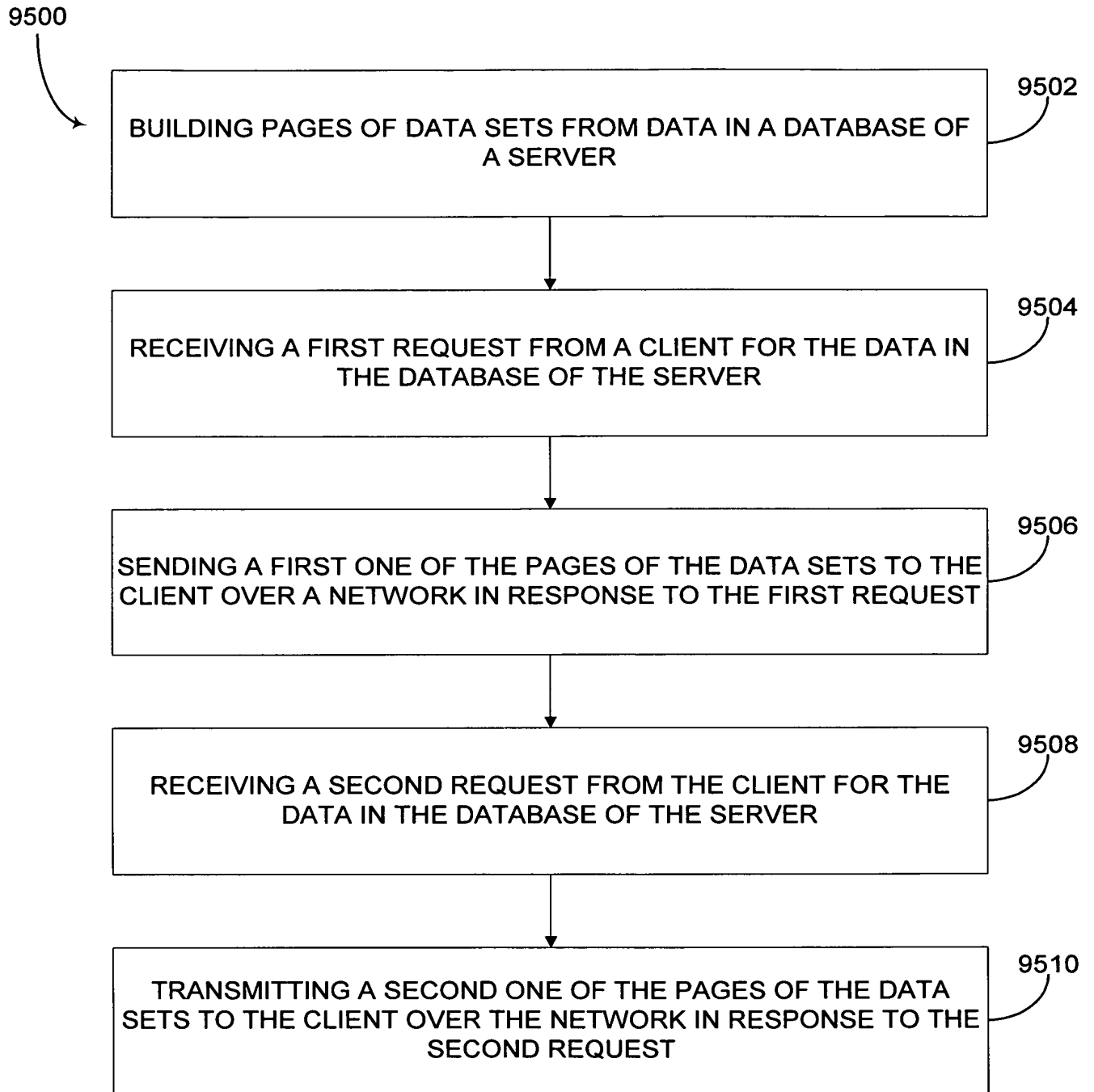


Figure 95

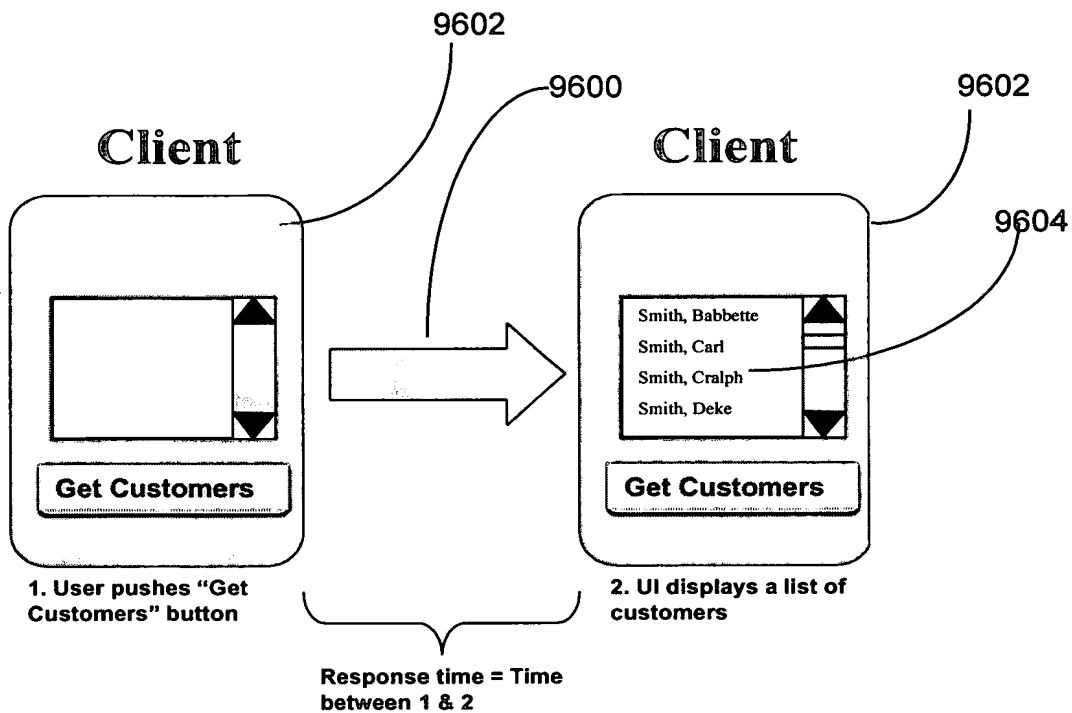


Figure 96

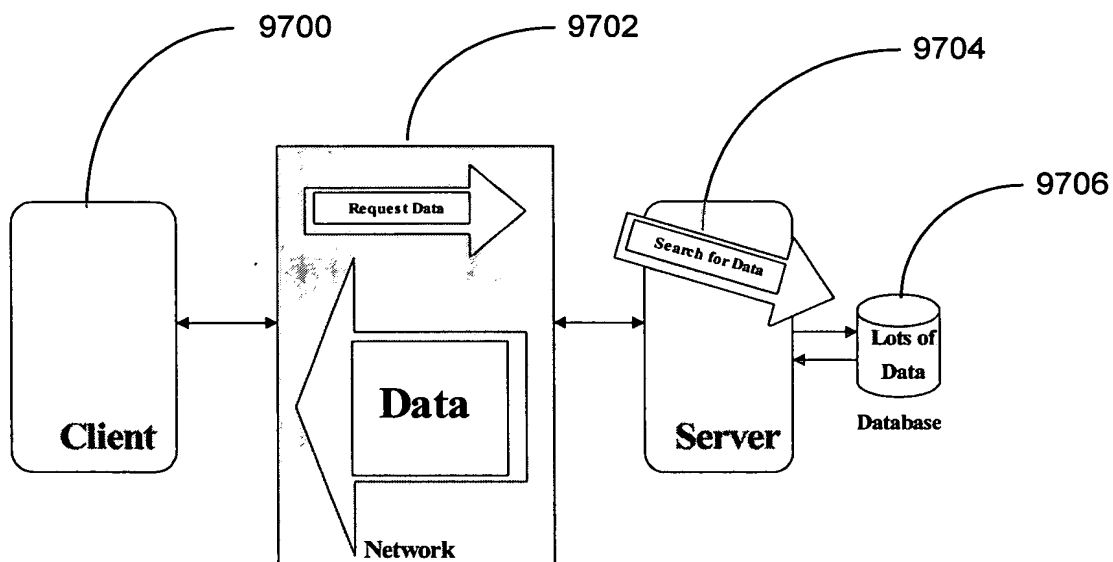


Figure 97

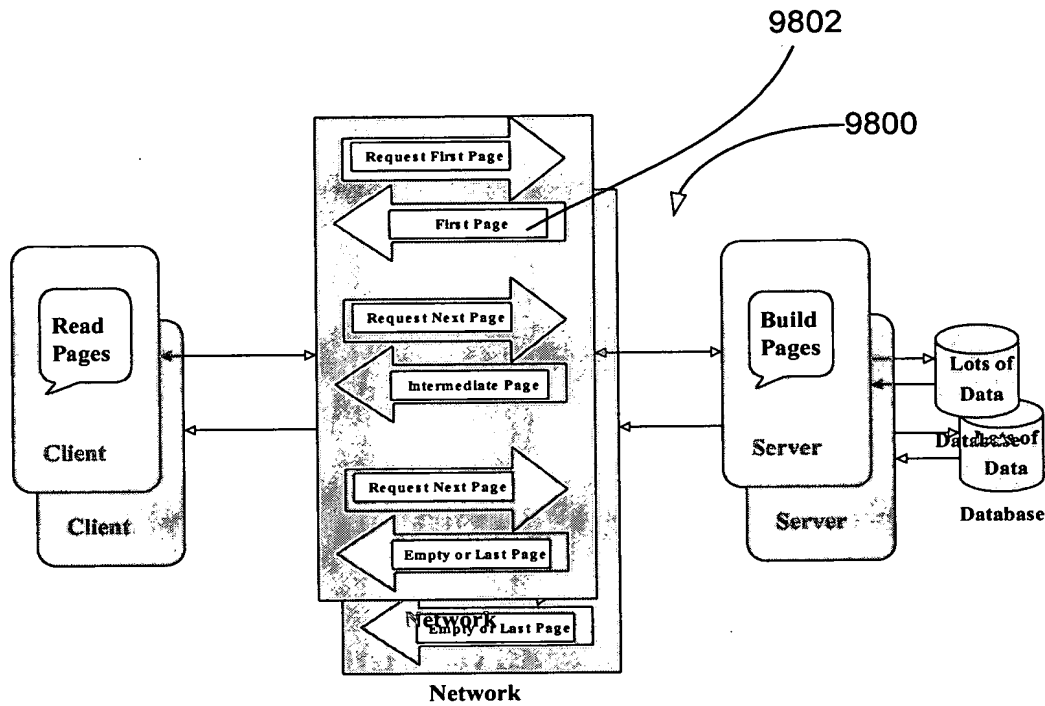


Figure 98

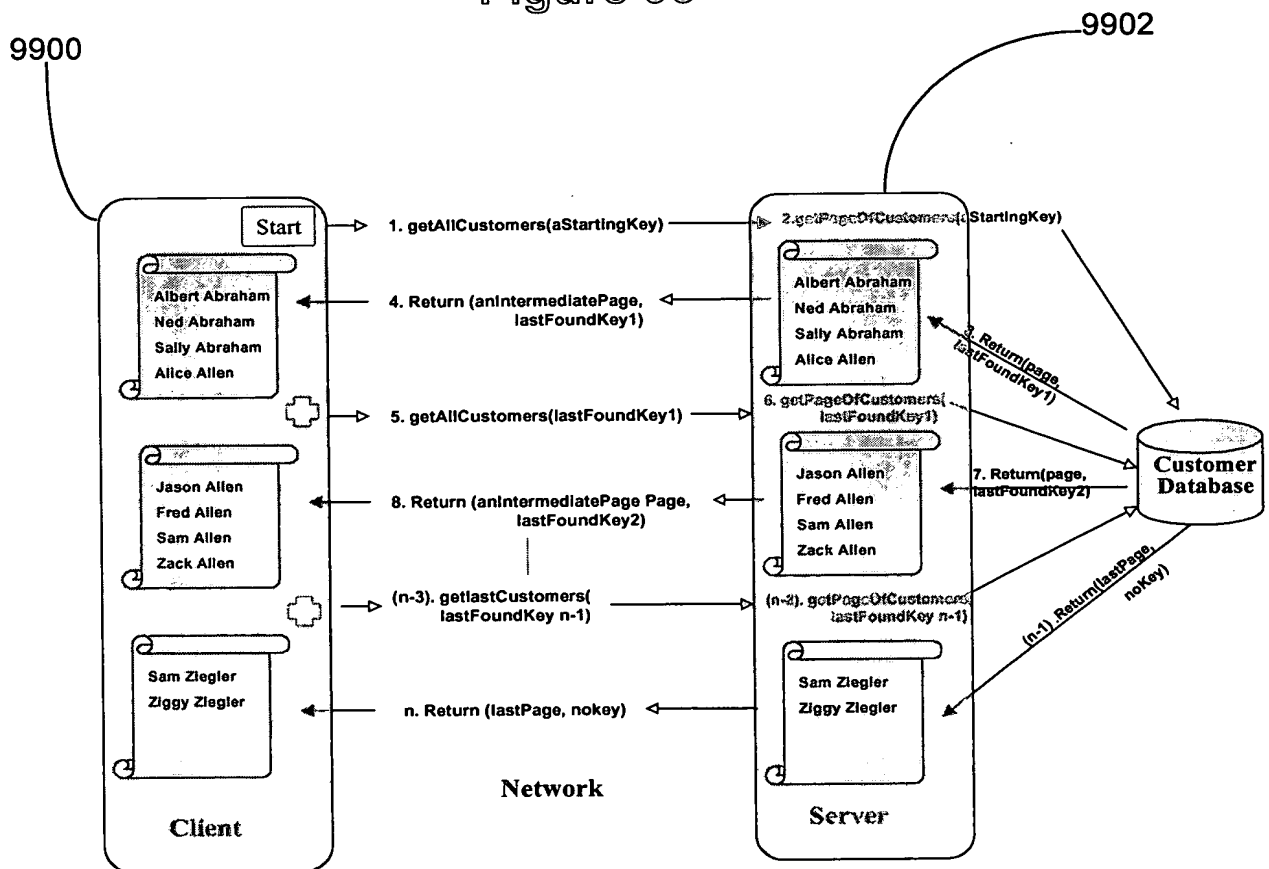


Figure 99

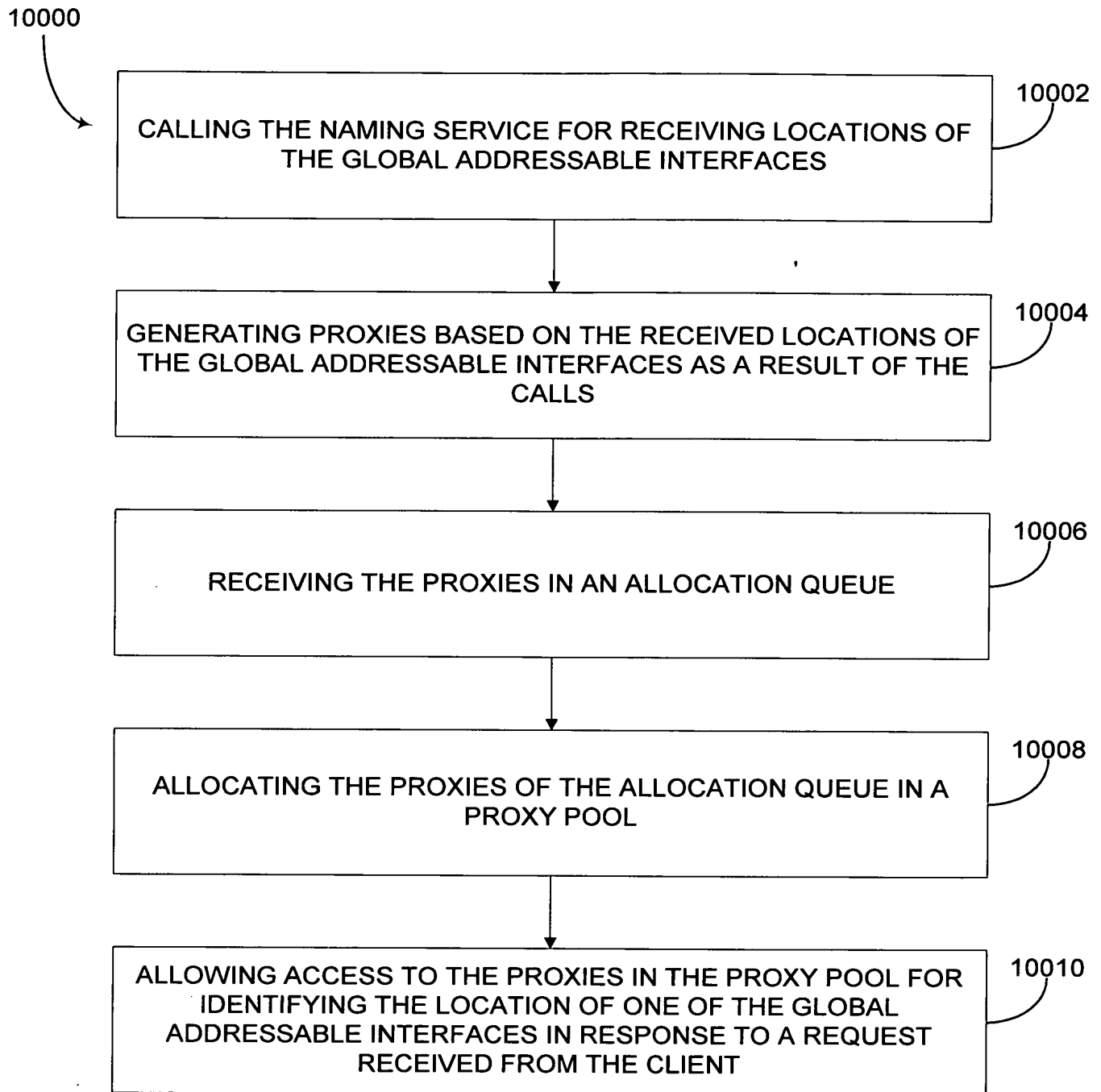


Figure 100

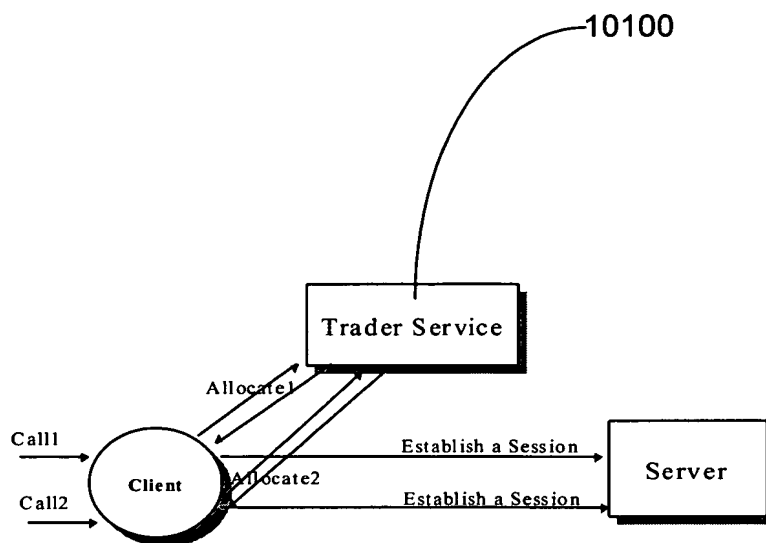


Figure 101

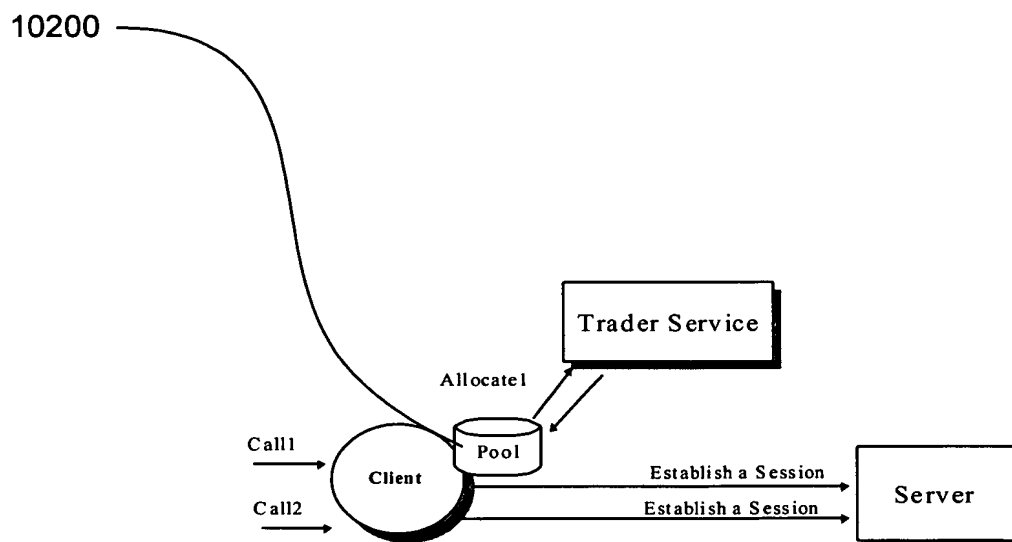


Figure 102

Figure 103

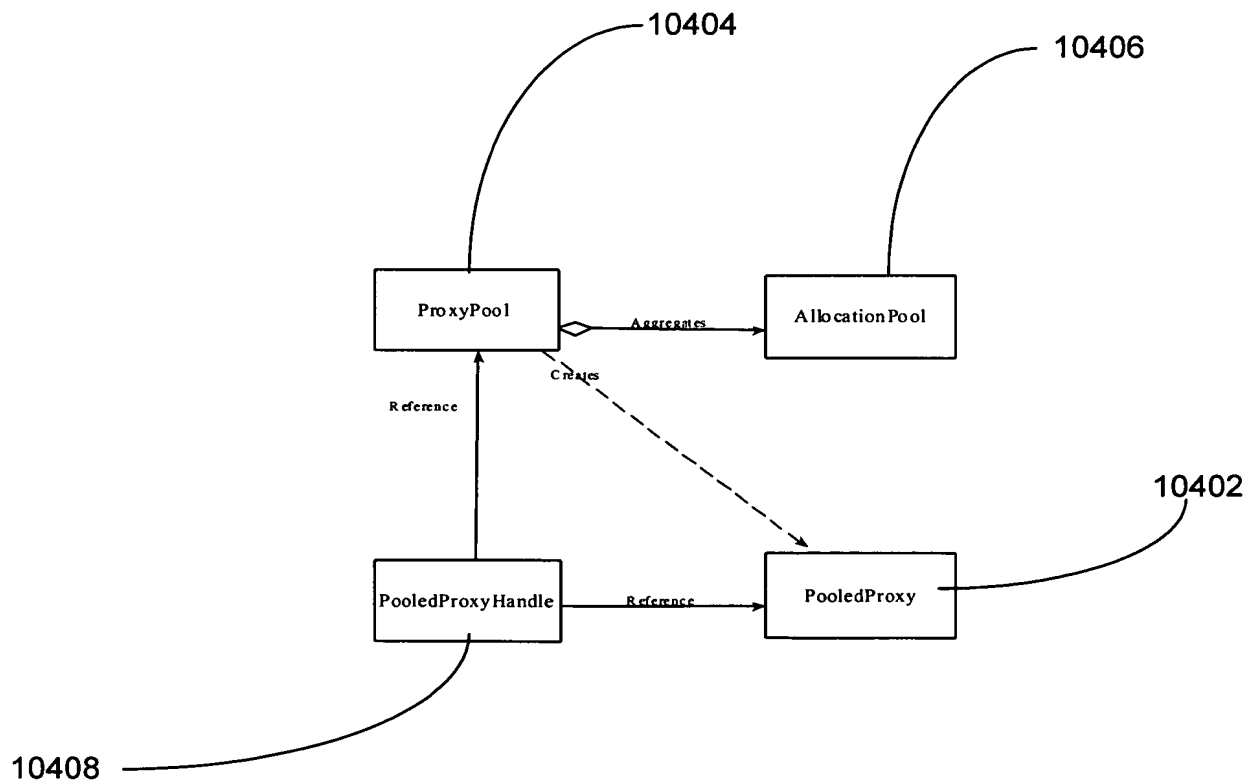


Figure 104

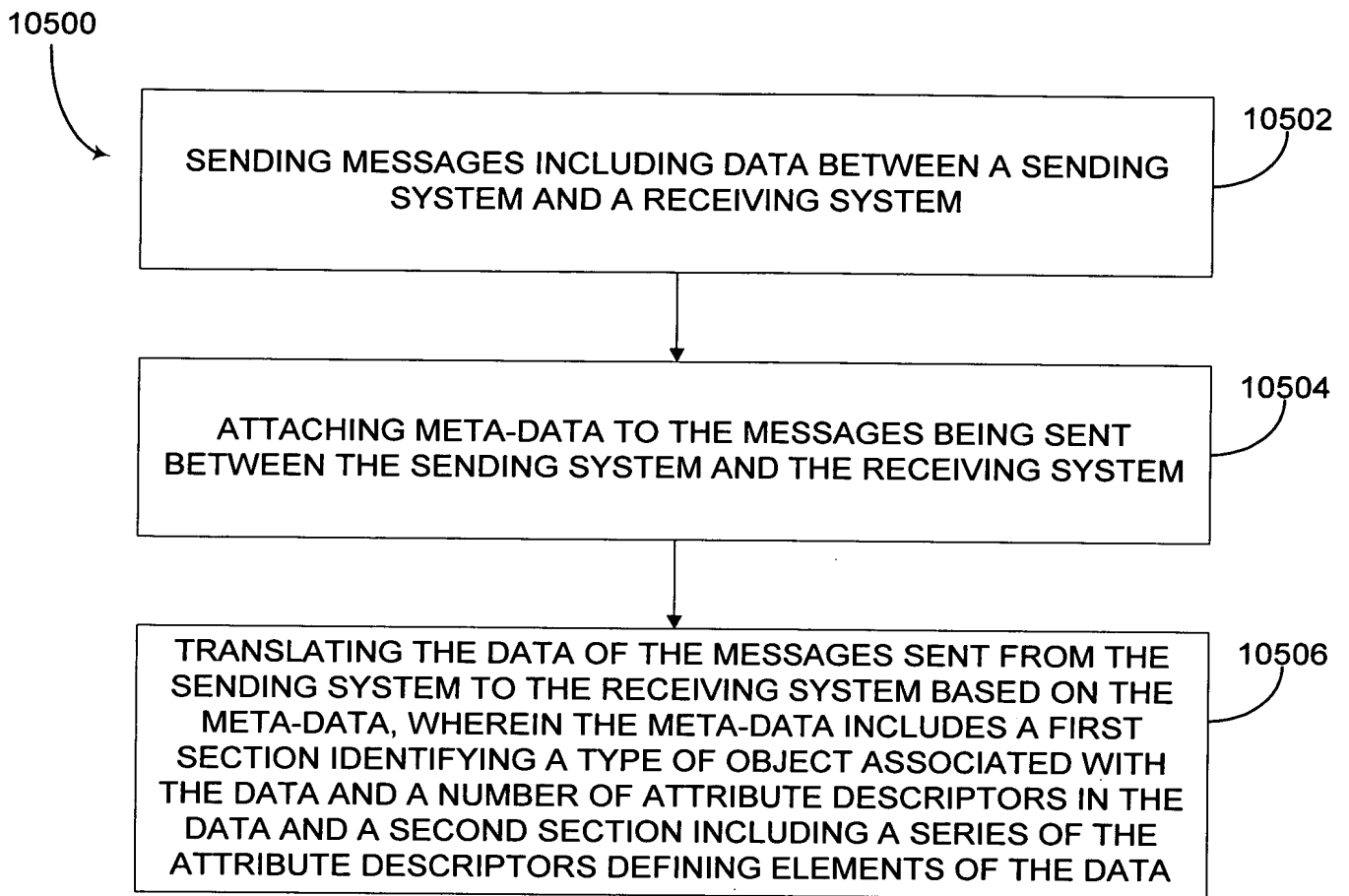


Figure 105

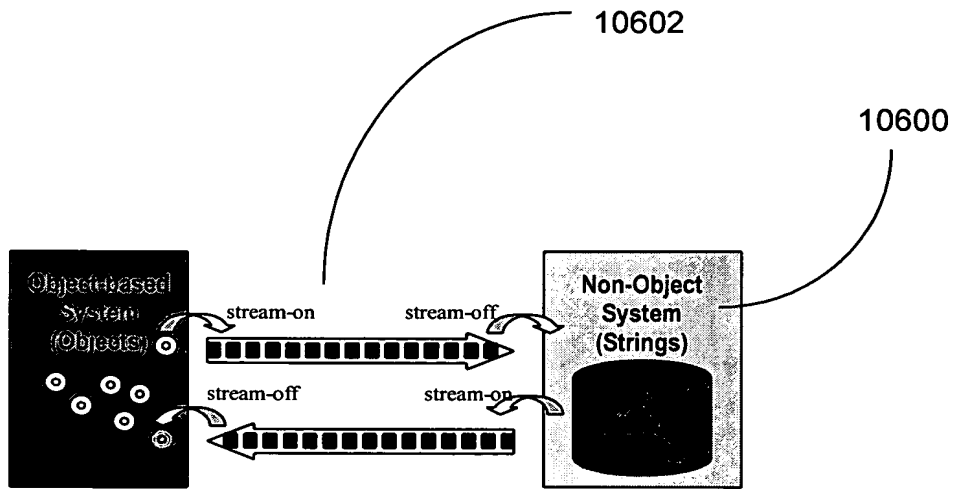


Figure 106

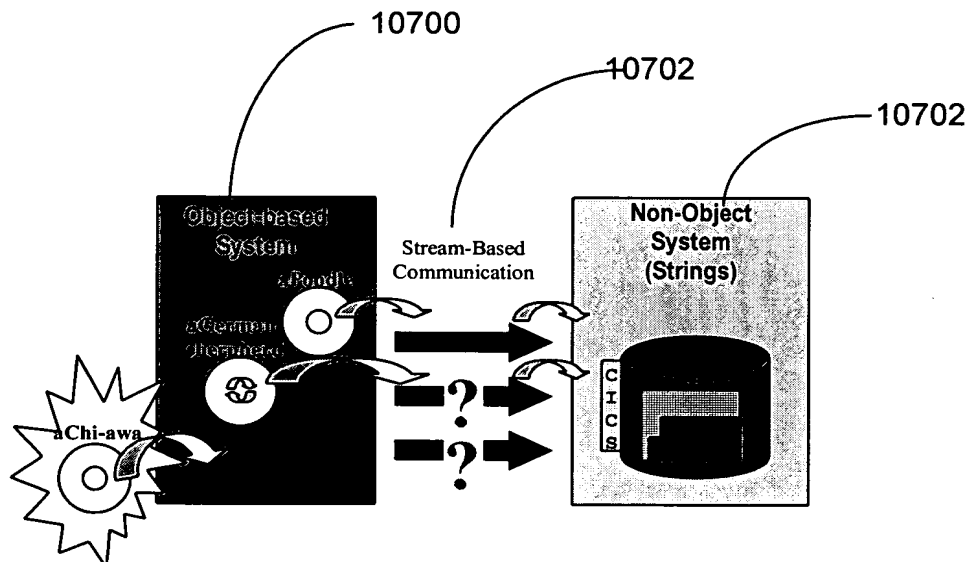


Figure 107

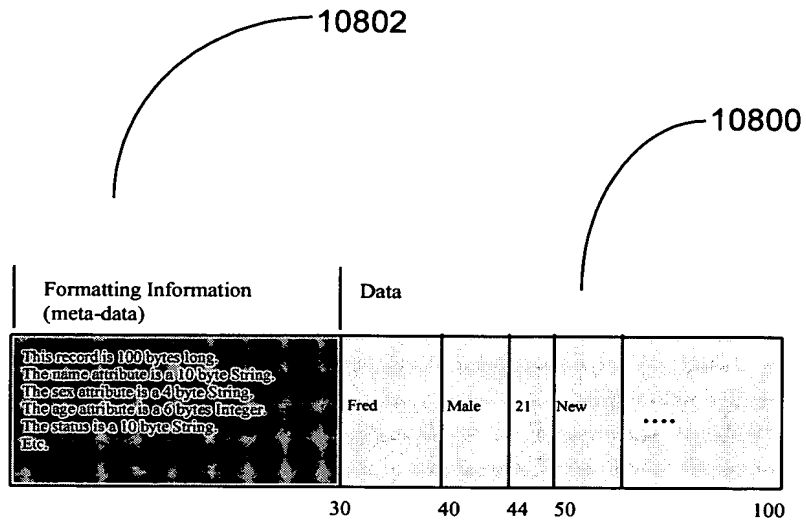


Figure 108

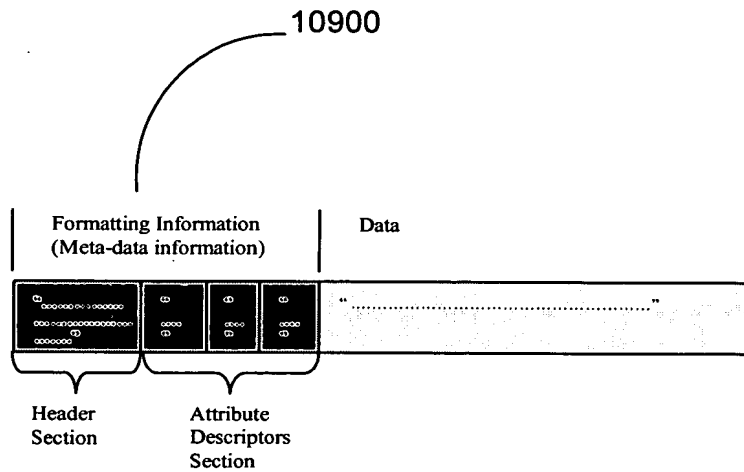


Figure 109

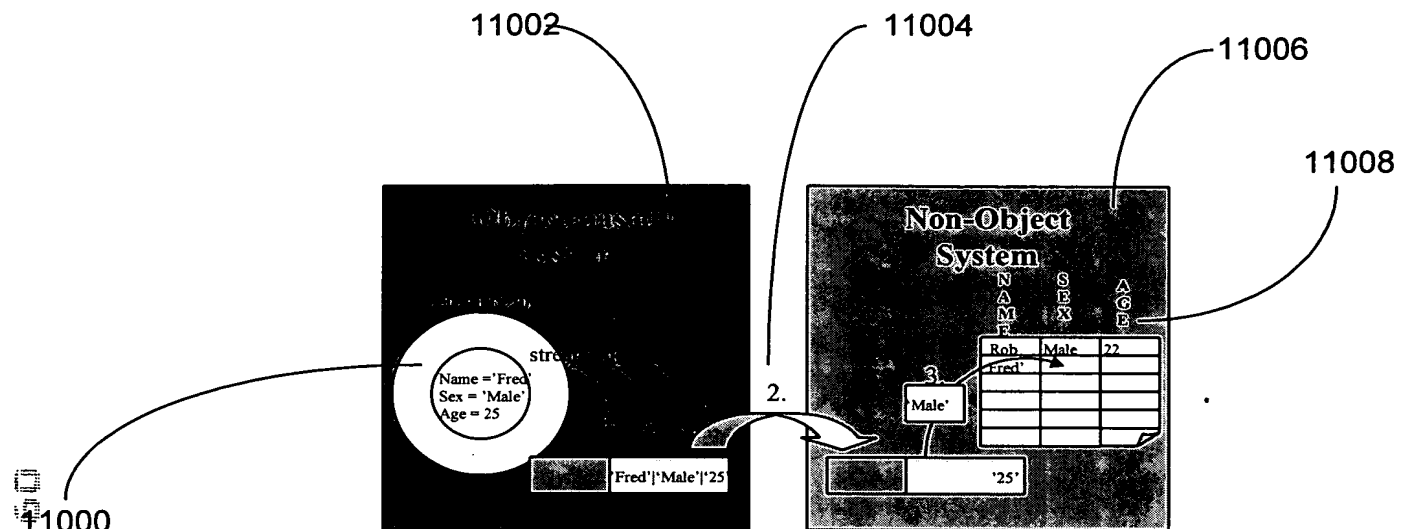


Figure 110

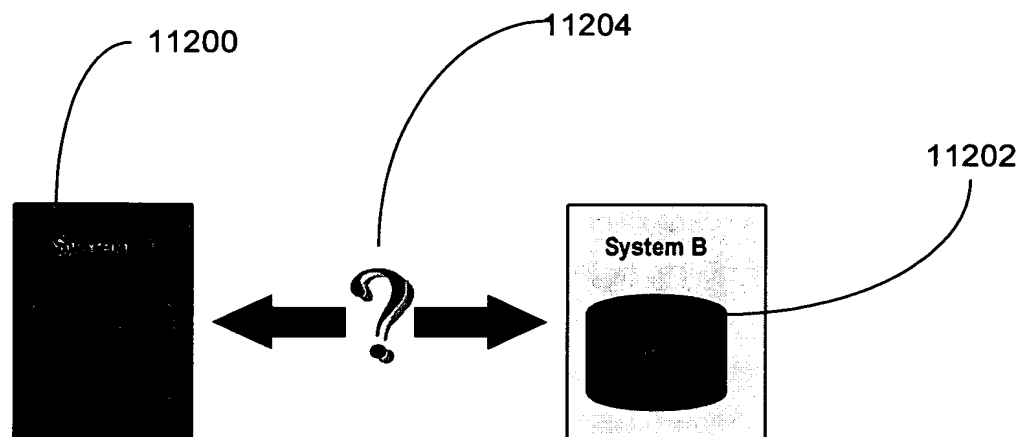


Figure 112

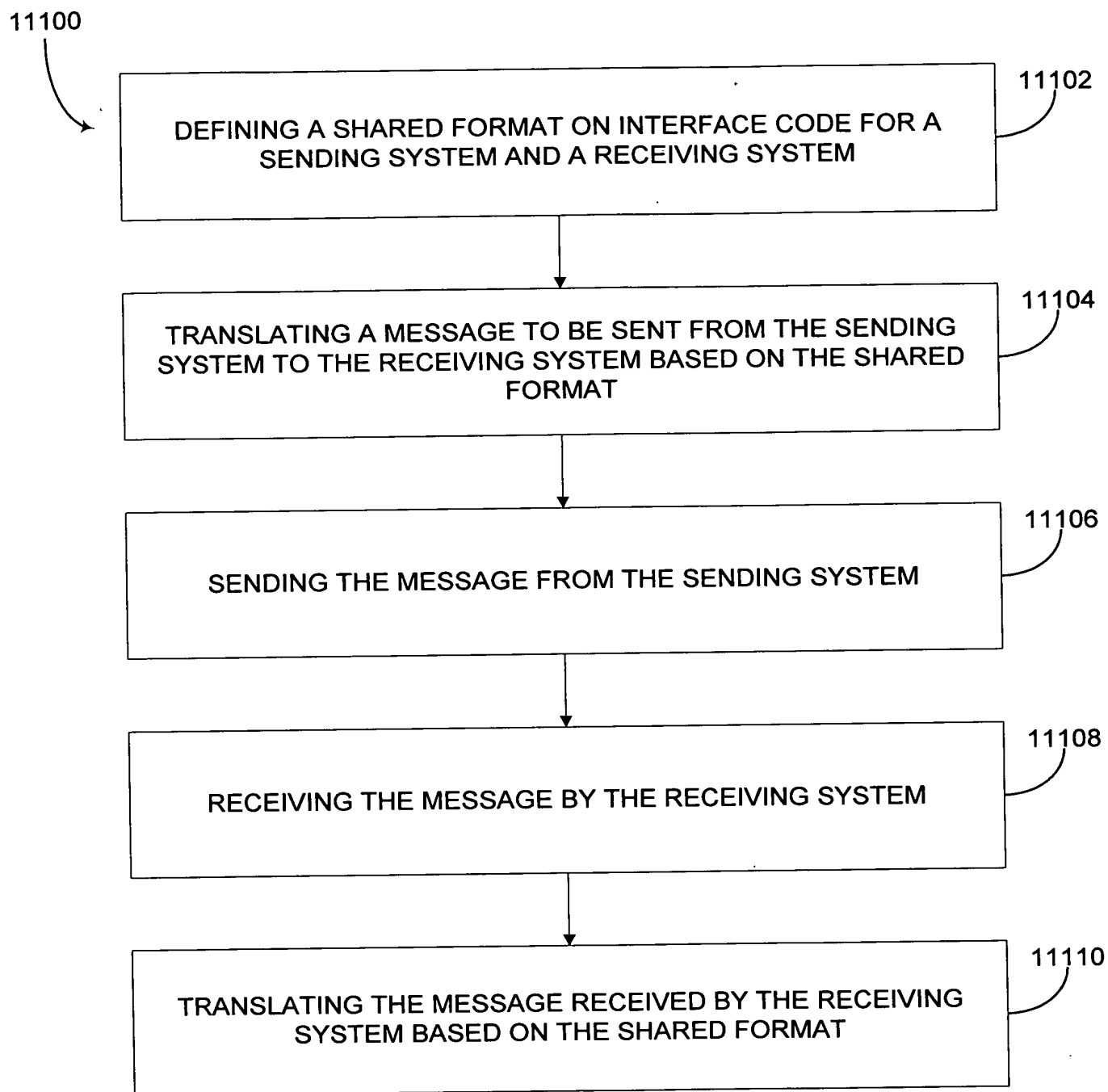


Figure 111

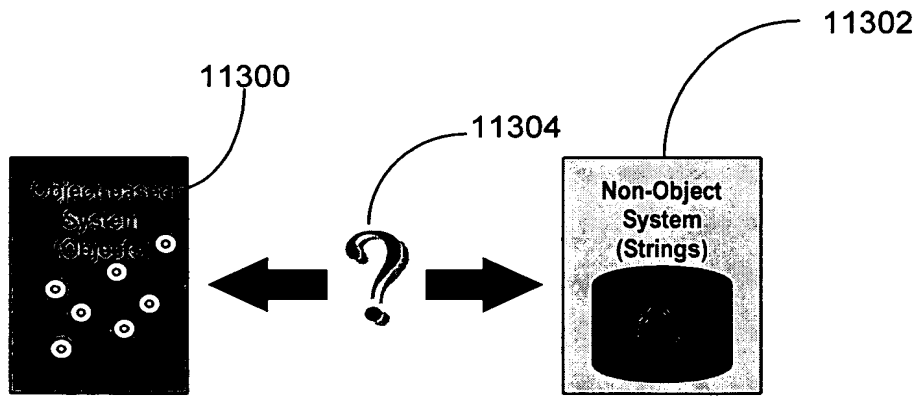


Figure 113

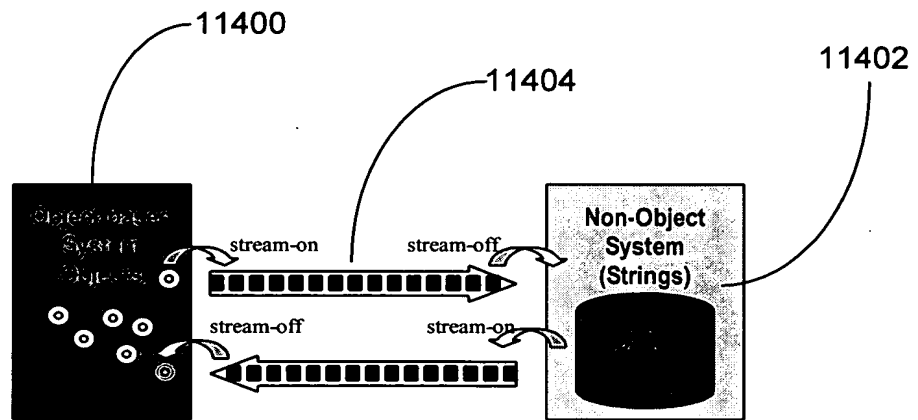


Figure 114

667630"49948660

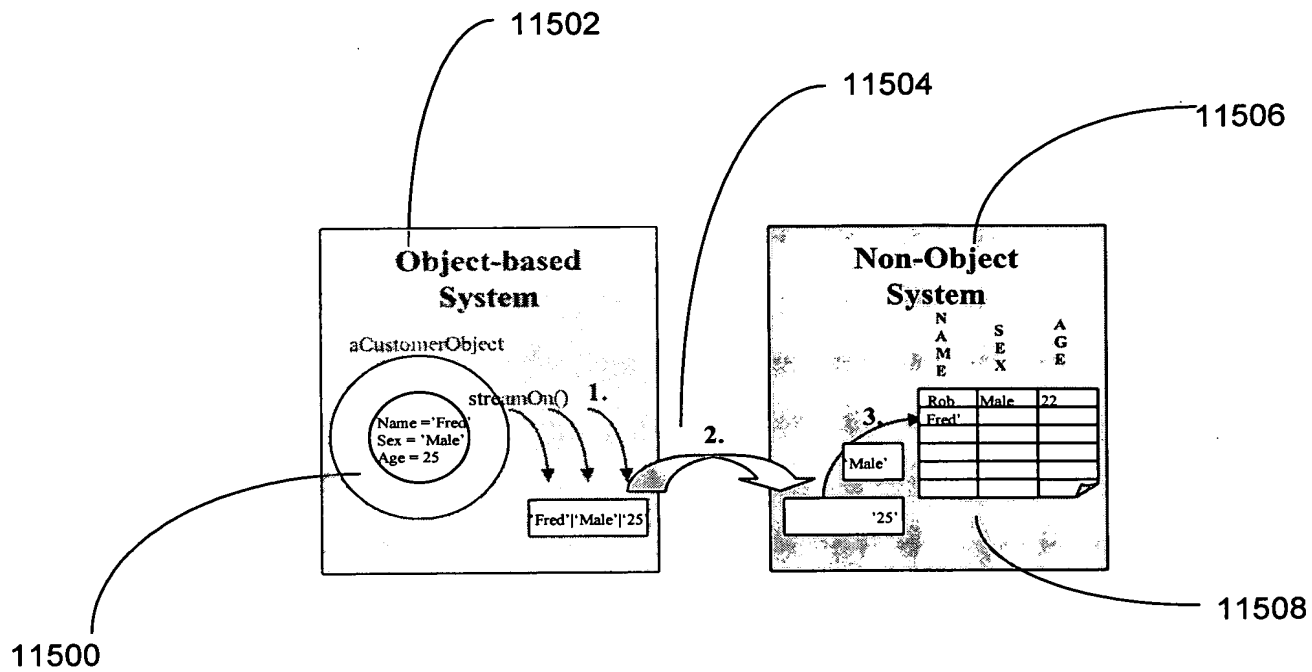


Figure 115

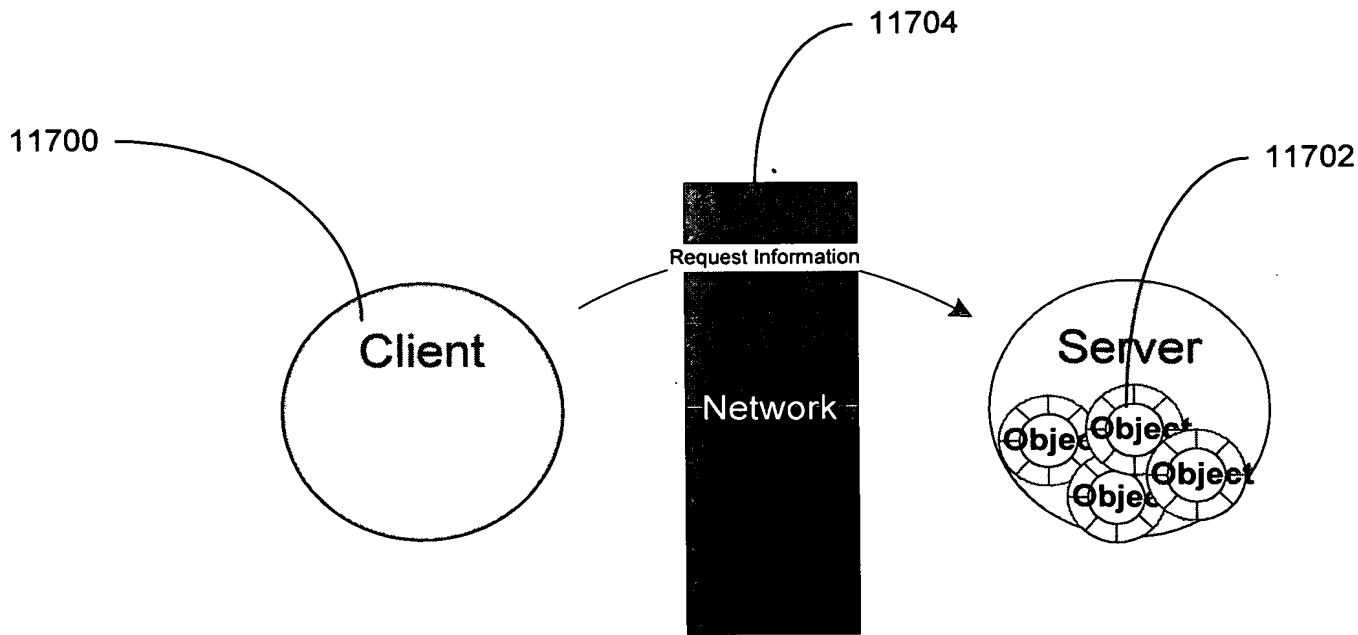


Figure 117

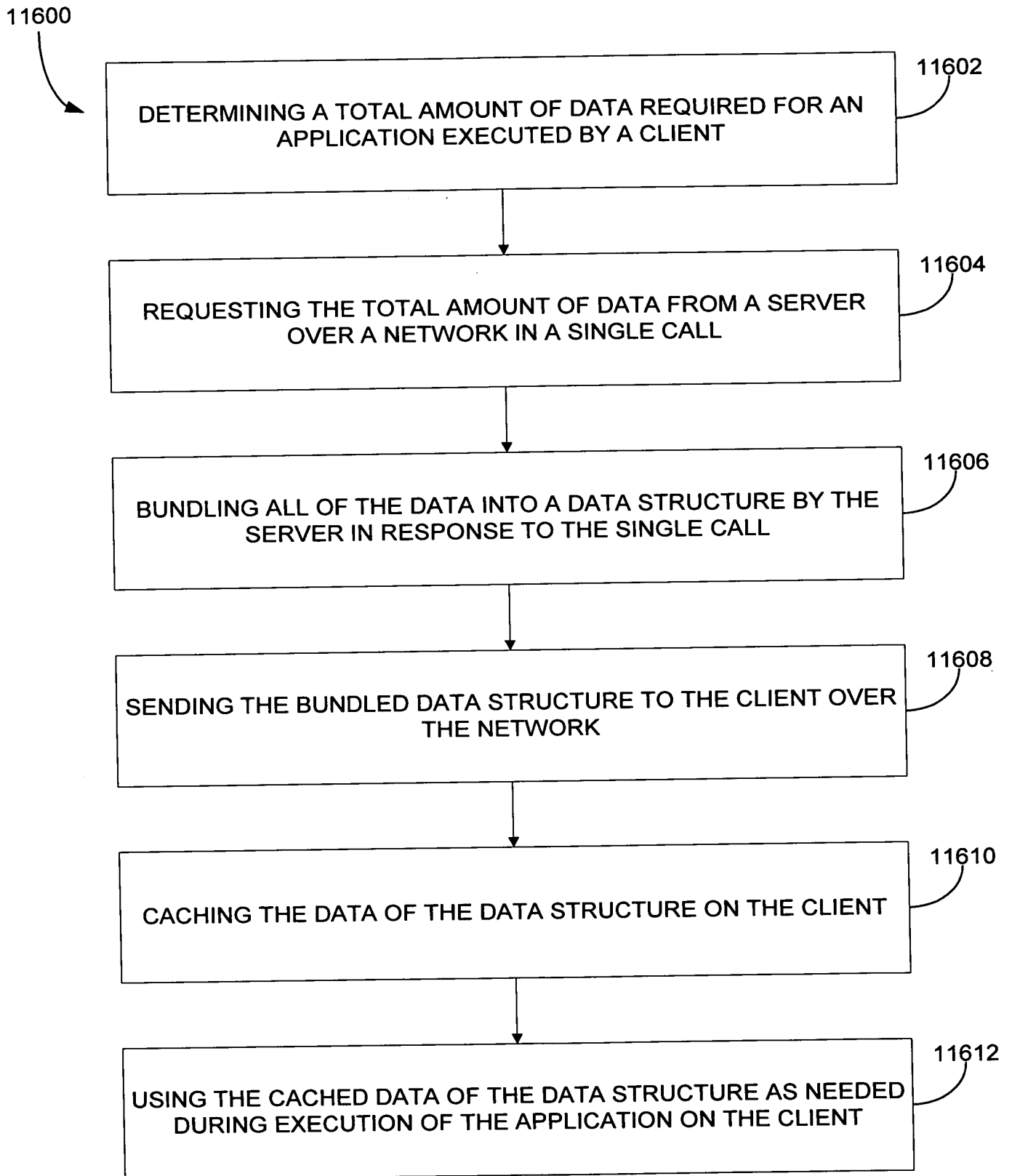


Figure 116

Diagram illustrating a Client-Server architecture with a Network:

- Client (11902):** Contains a **Data Structure (11900)**.
- Network (11906):** A central vertical bar representing the communication channel.
- Server (11904):** Contains an **Object**.

Interactions and Data Flow:

- The Client sends a request labeled **Get All Necessary Data** to the Network.
- The Network returns data labeled **Return All Data** to the Client.
- A **Data Structure** is shown near the Network, indicating data being processed or stored.

Figur 119

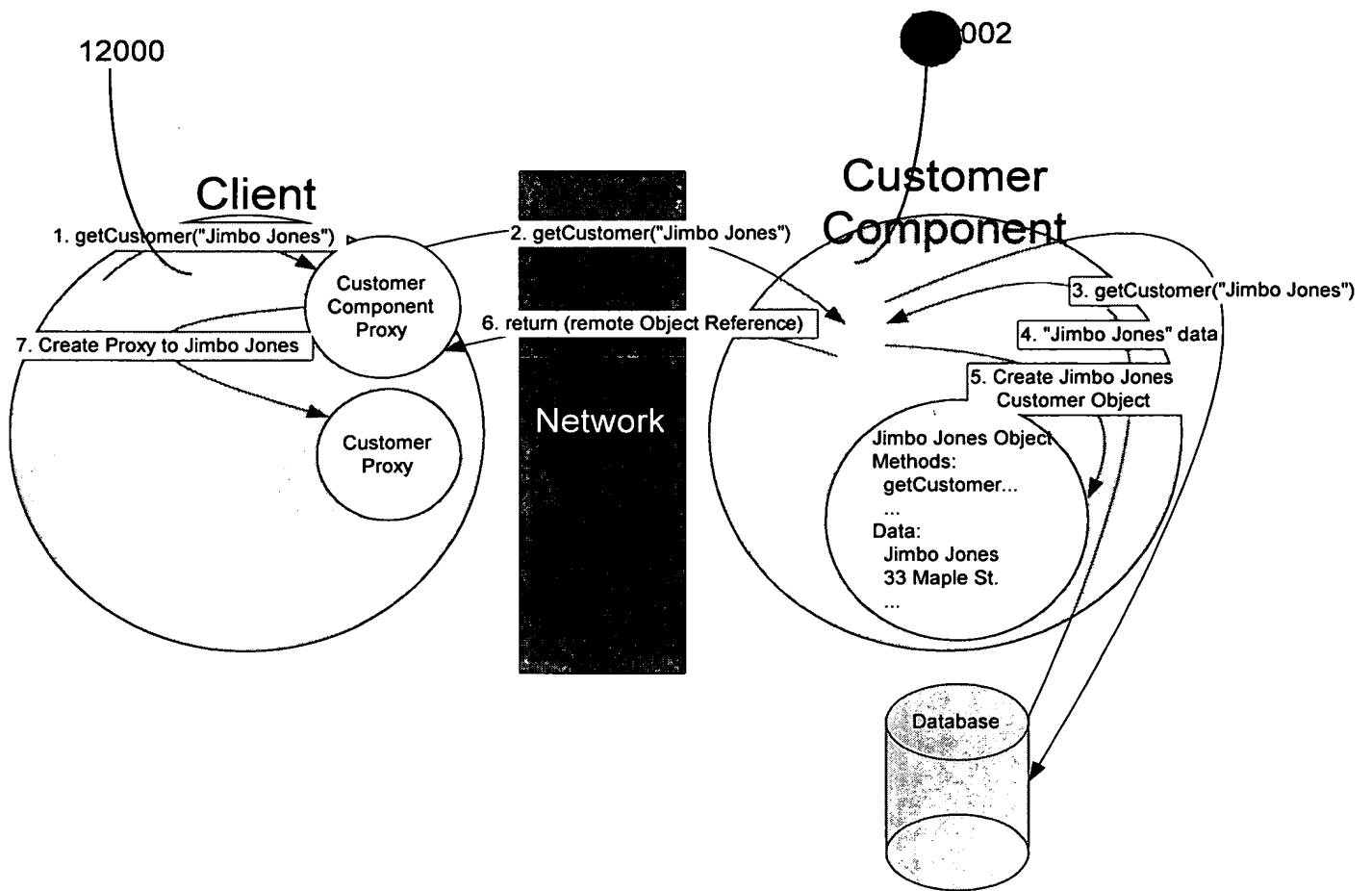


Figure 120

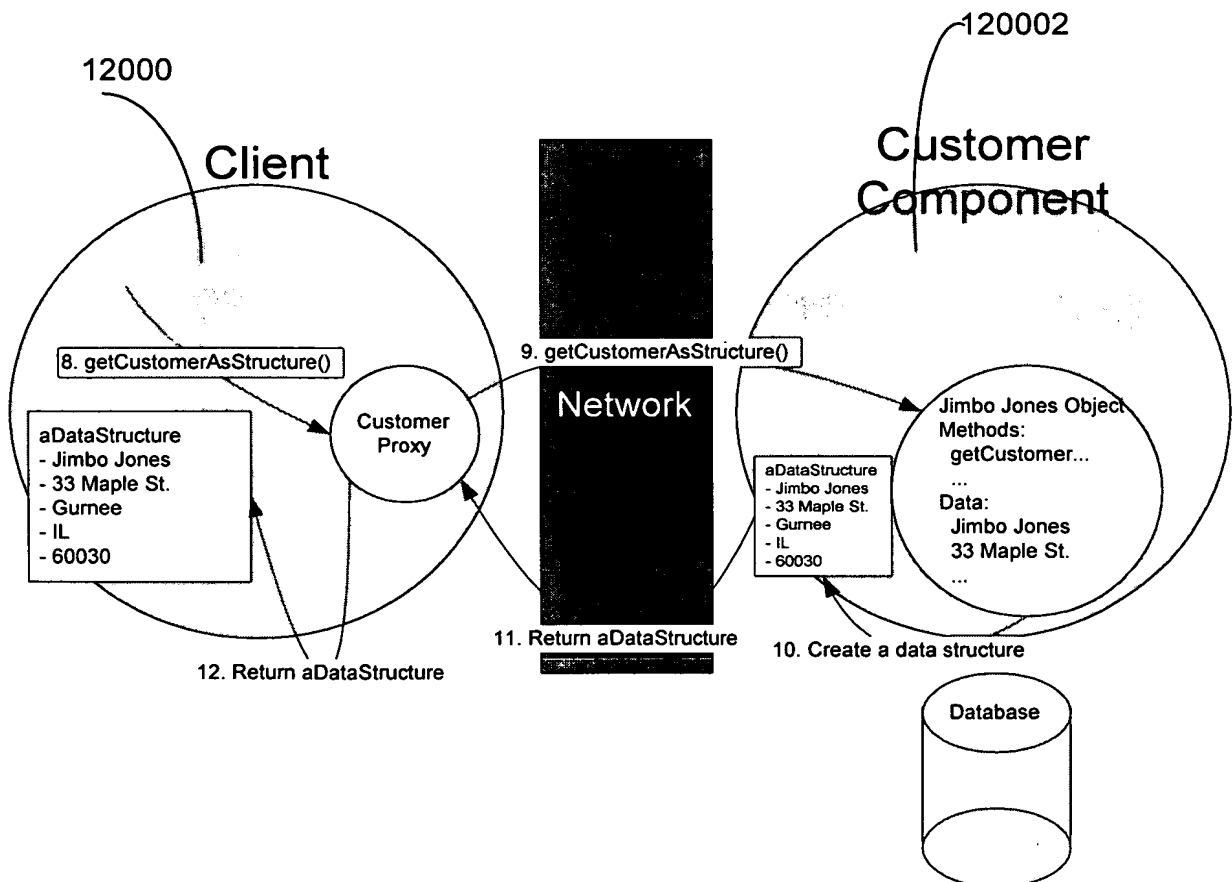


Figure 121

607230"45948660

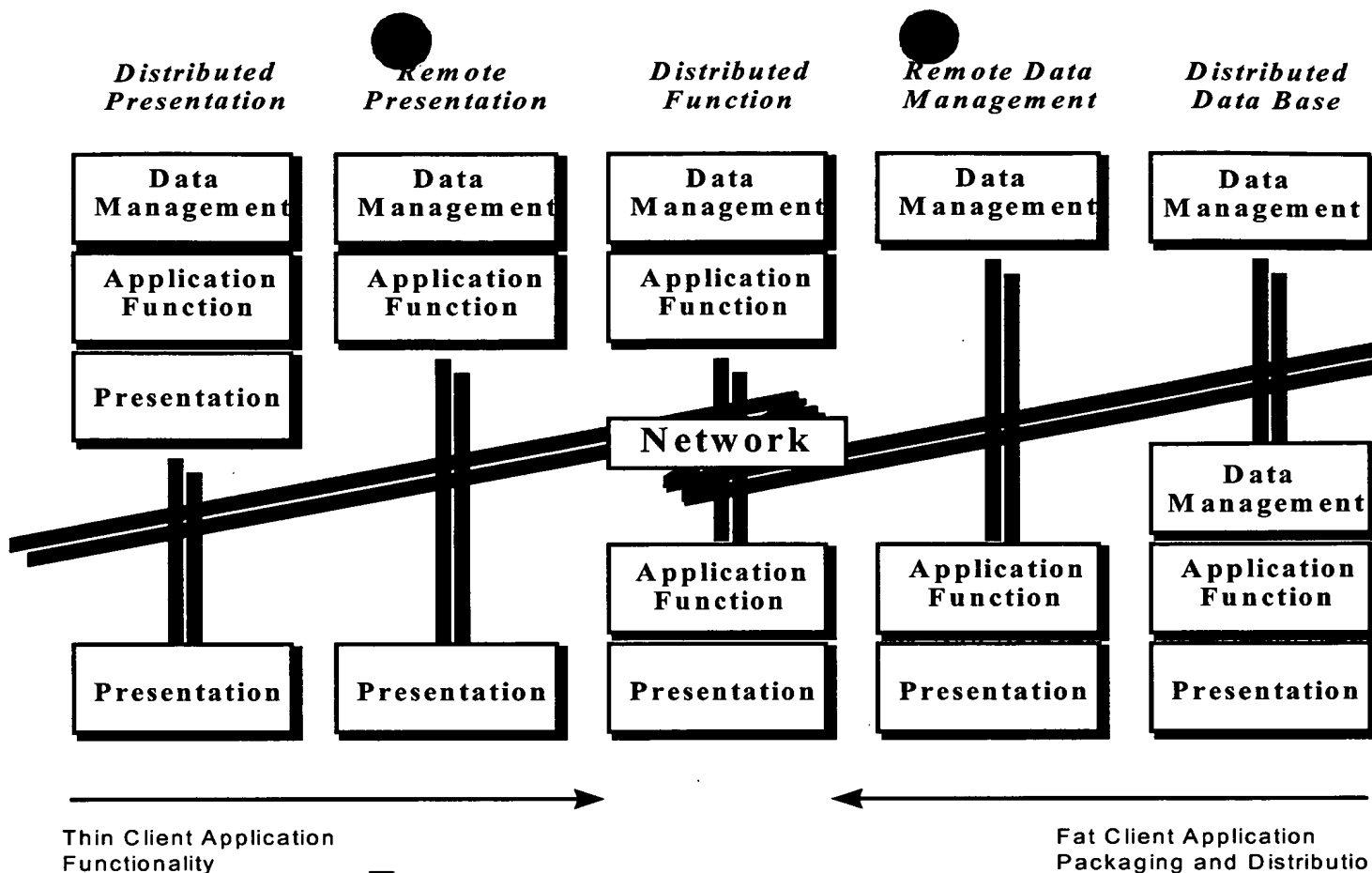


Figure 122

12200

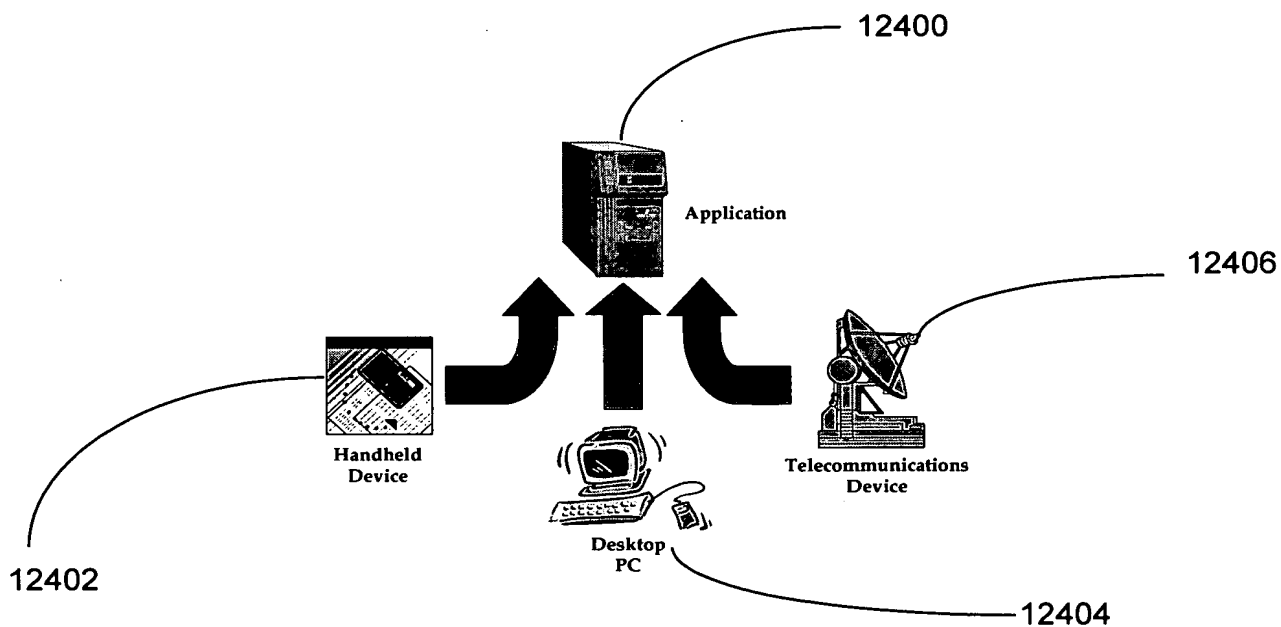


Figure 124

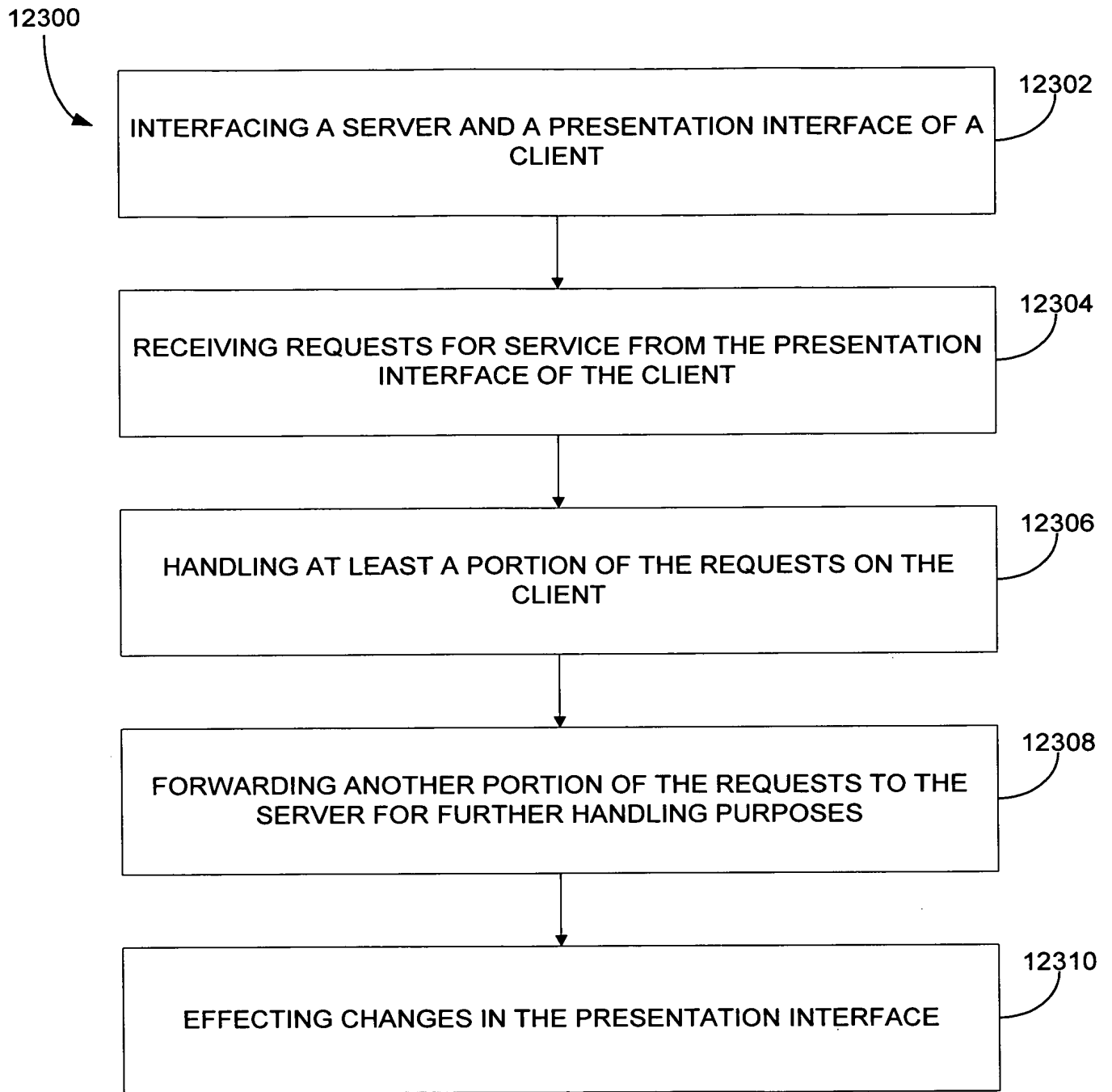


Figure 123

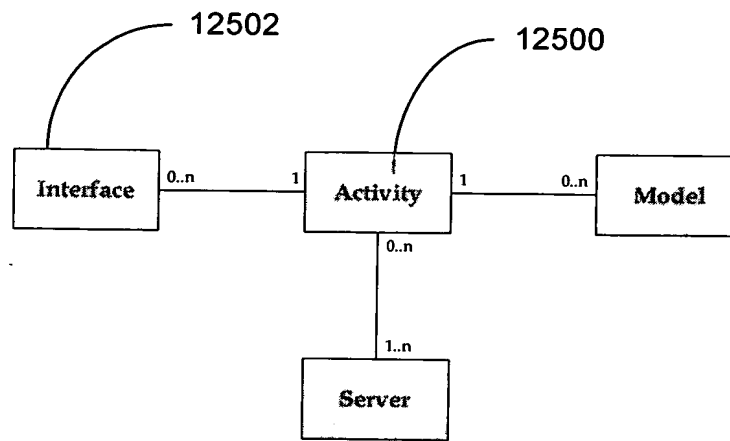


Figure 125

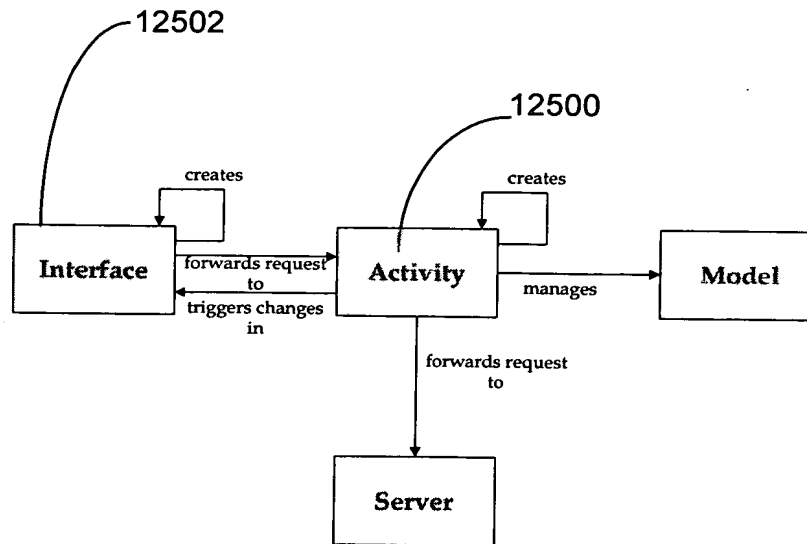


Figure 126

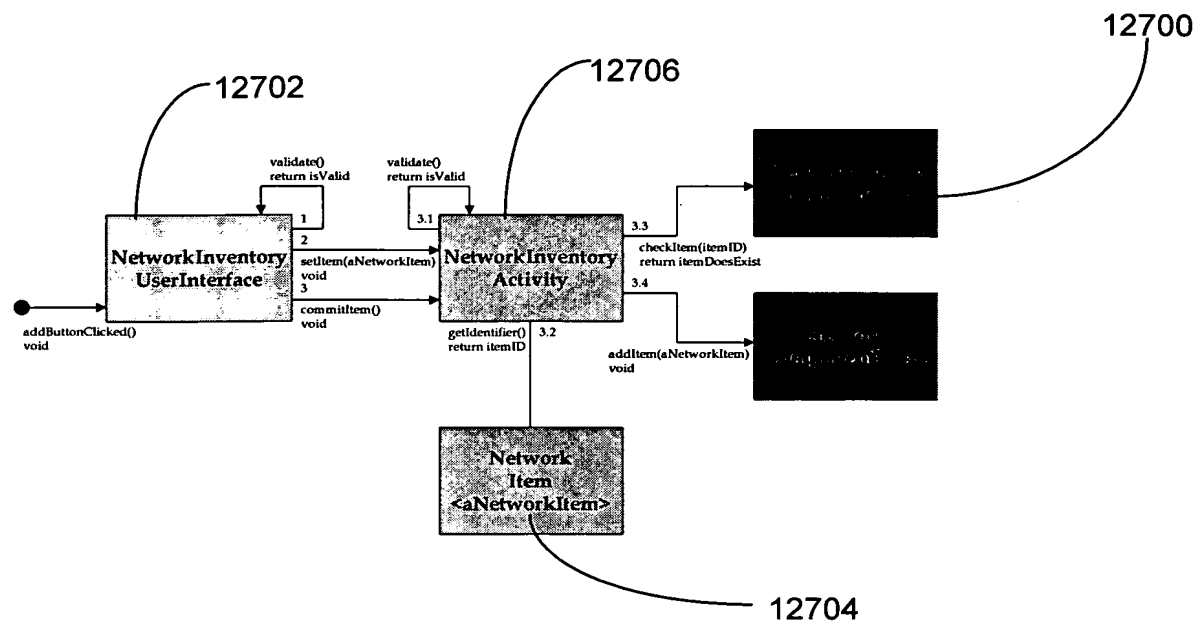
[illegible]

Figure 127

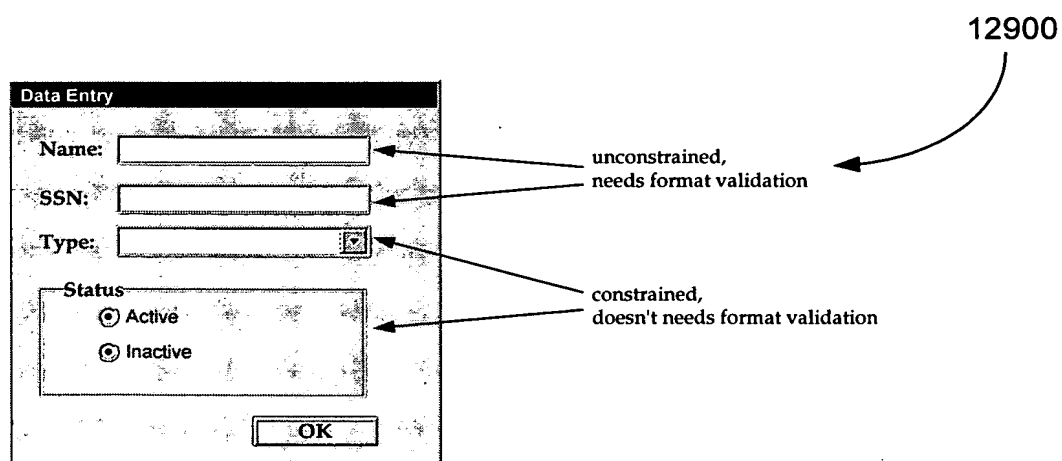


Figure 129

12800

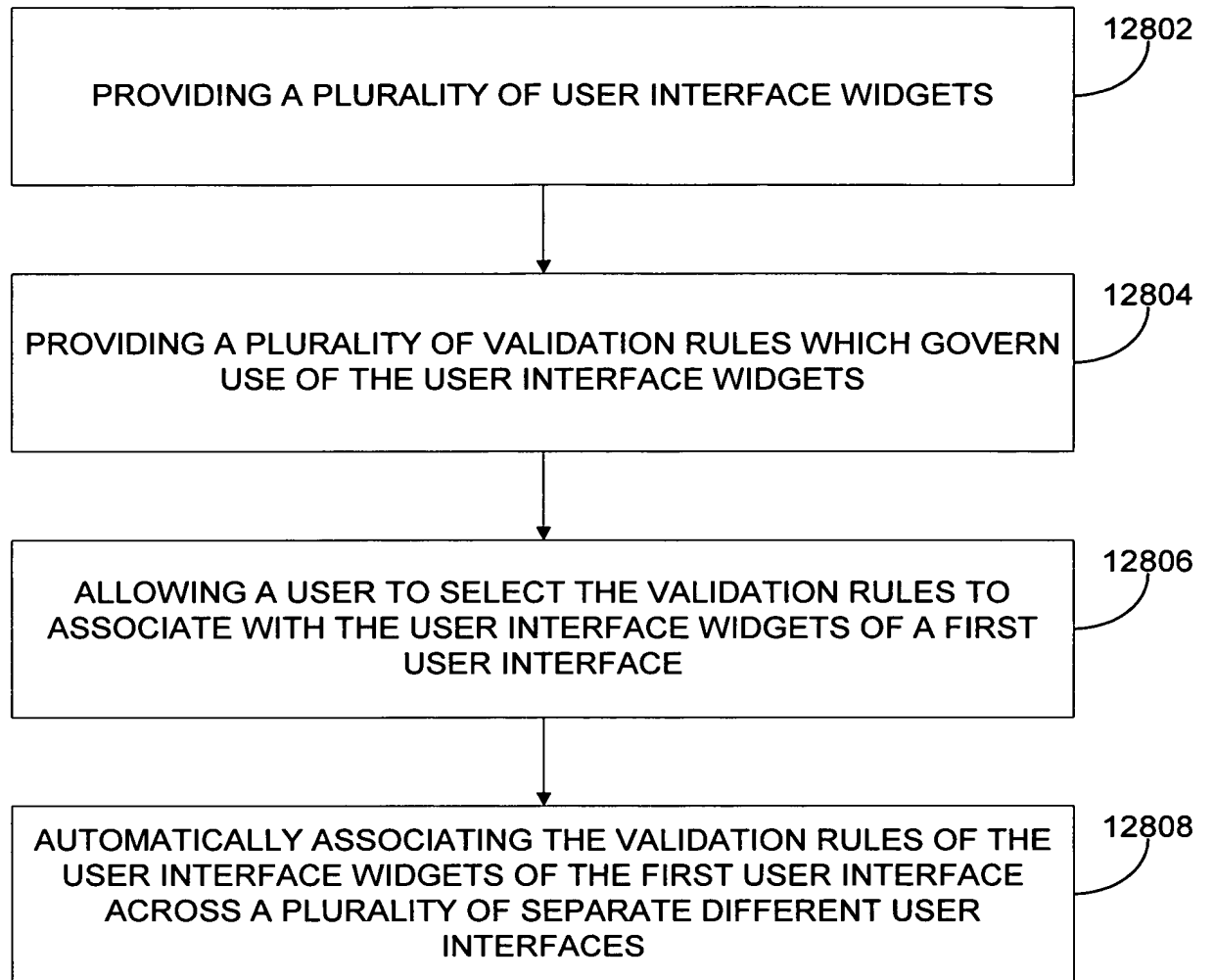


Figure 128

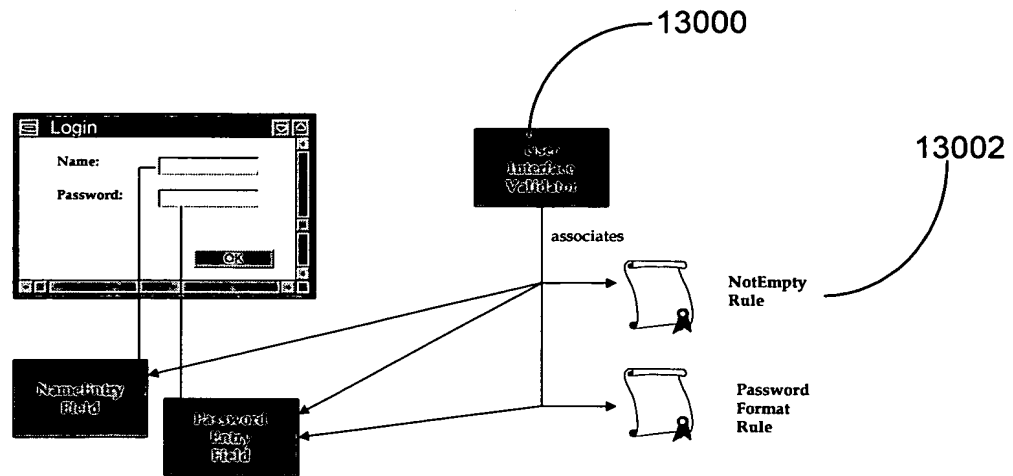


Figure 130

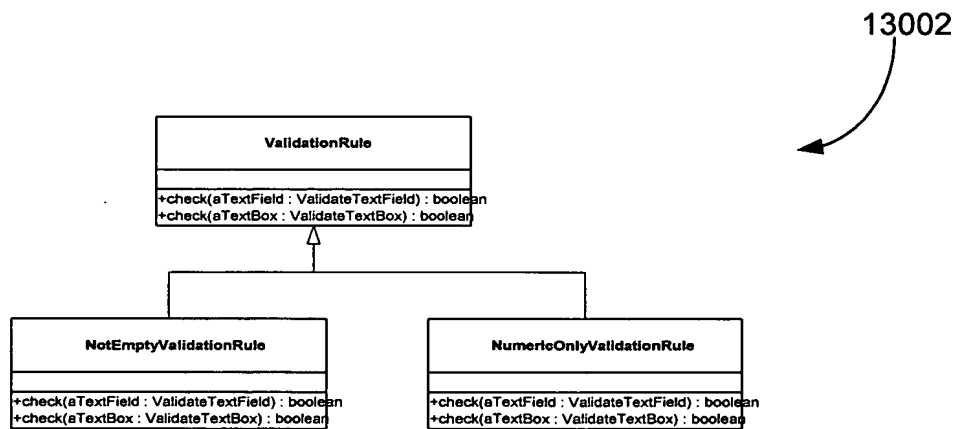


Figure 131

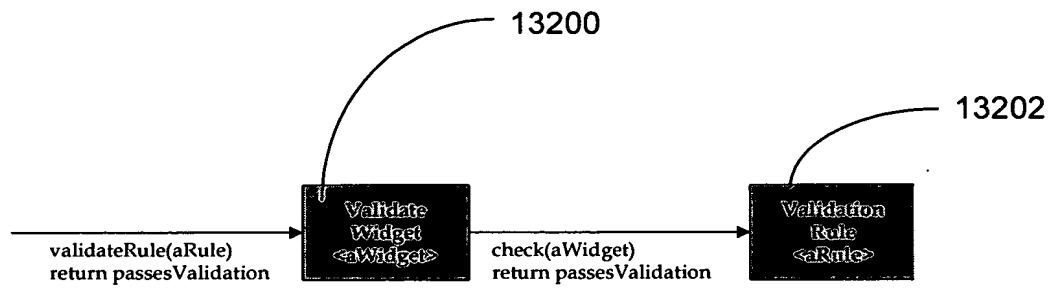


Figure 132

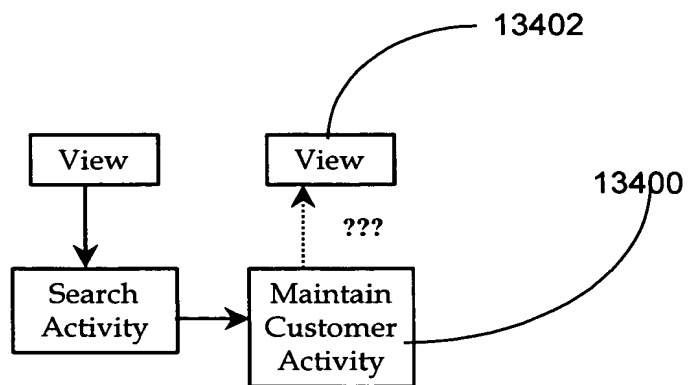


Figure 134

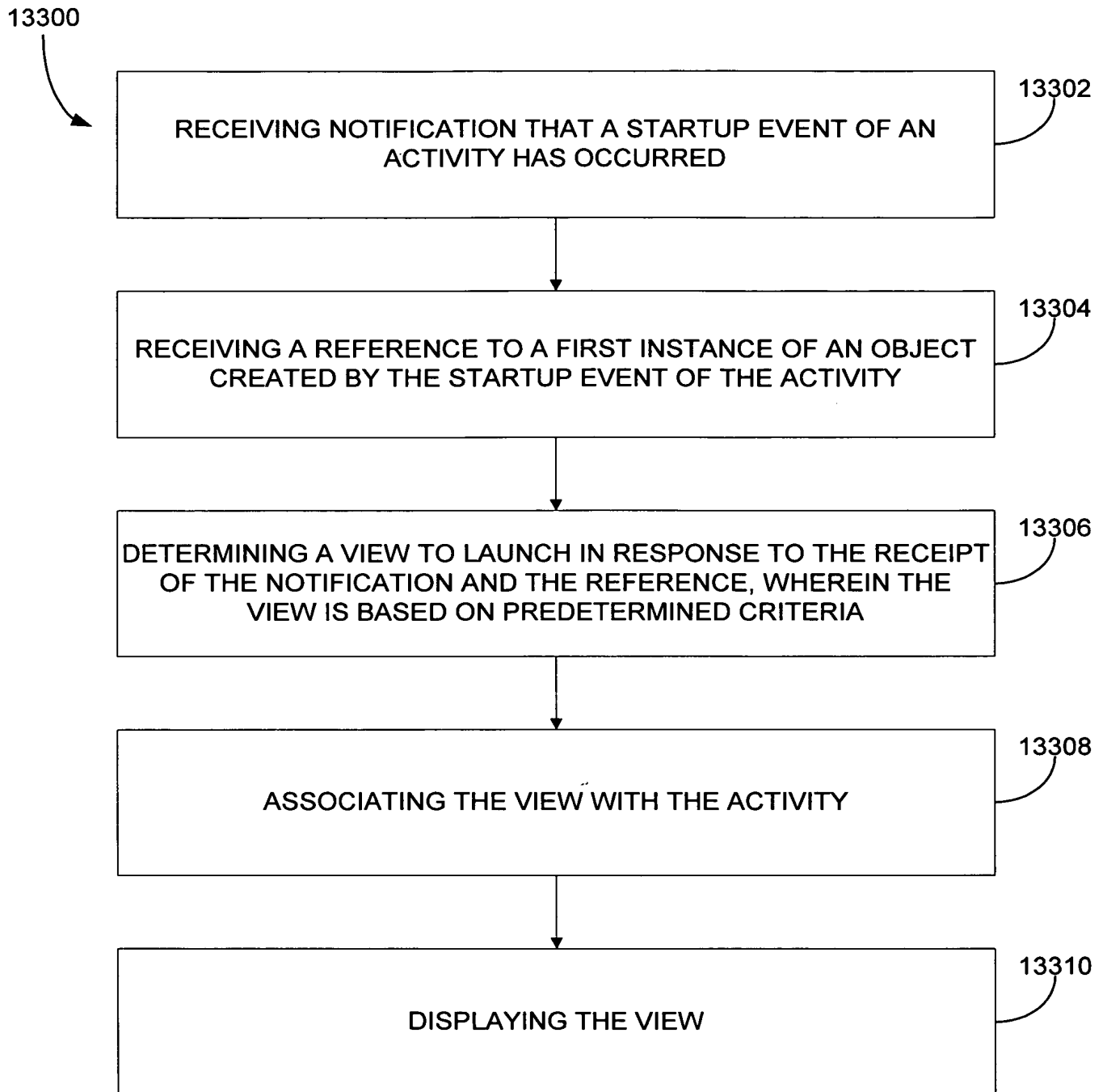


Figure 133

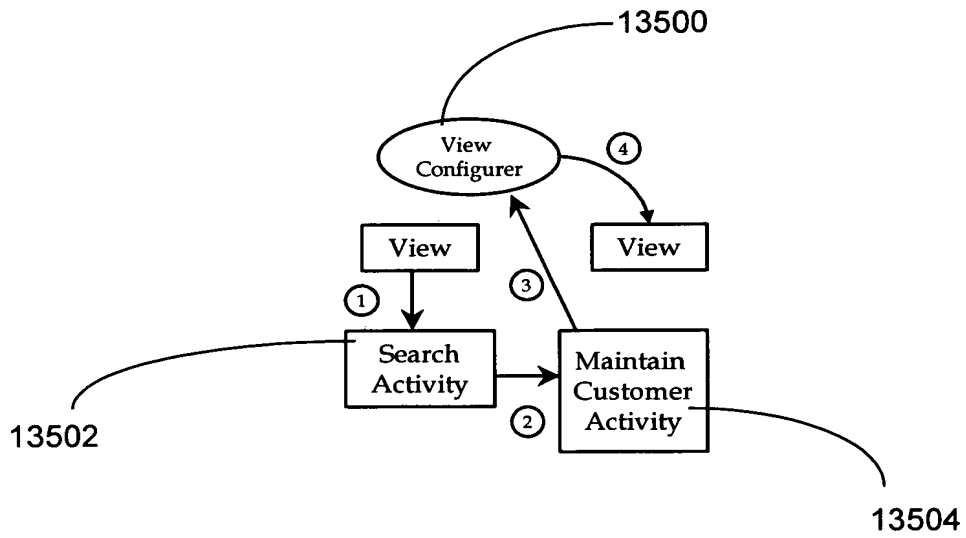


Figure 135

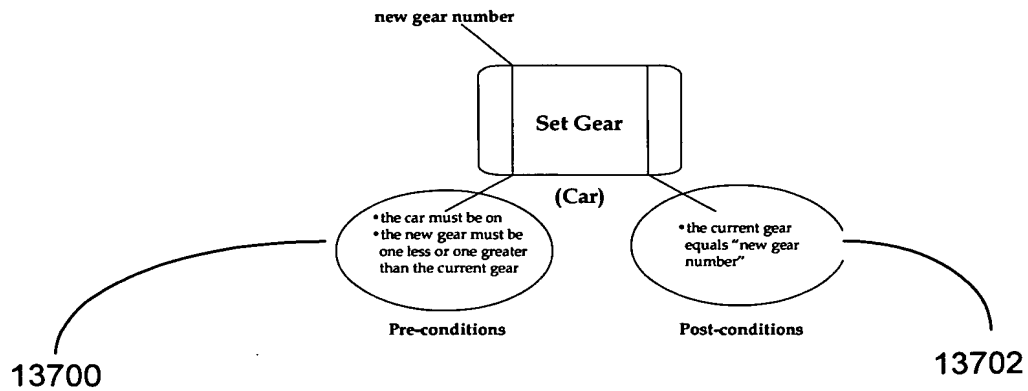


Figure 137

13600

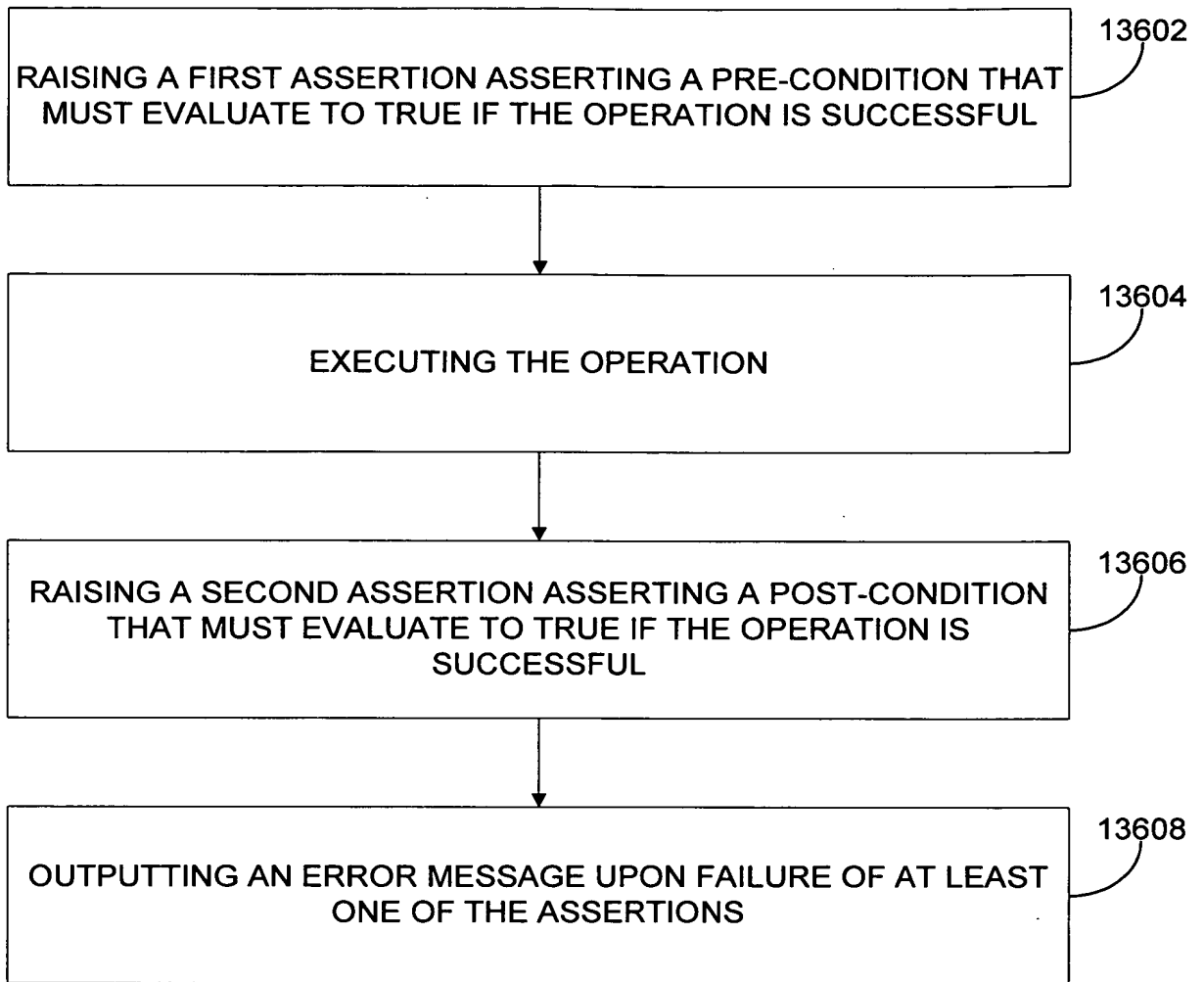


Figure 136

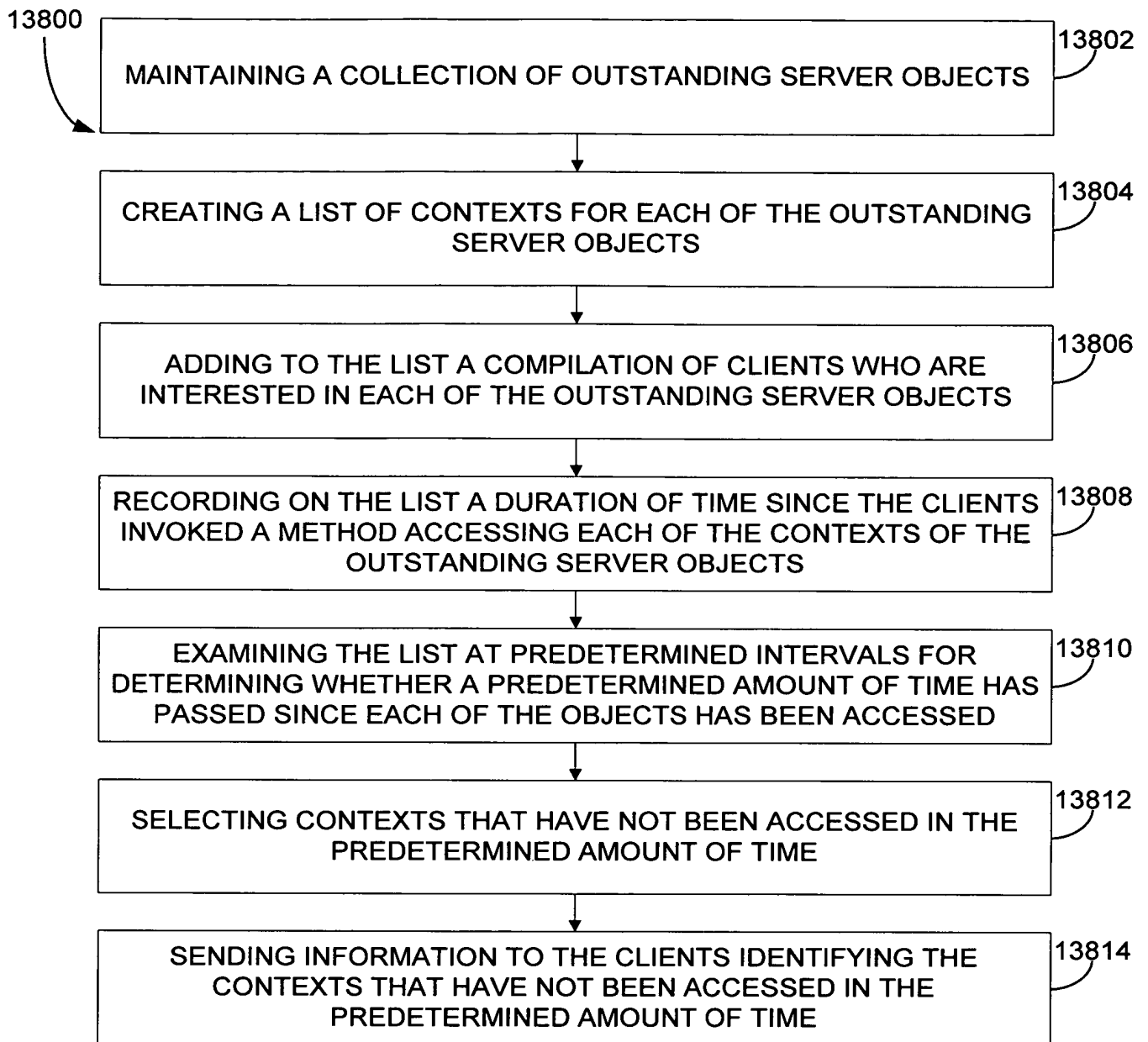


Figure 138

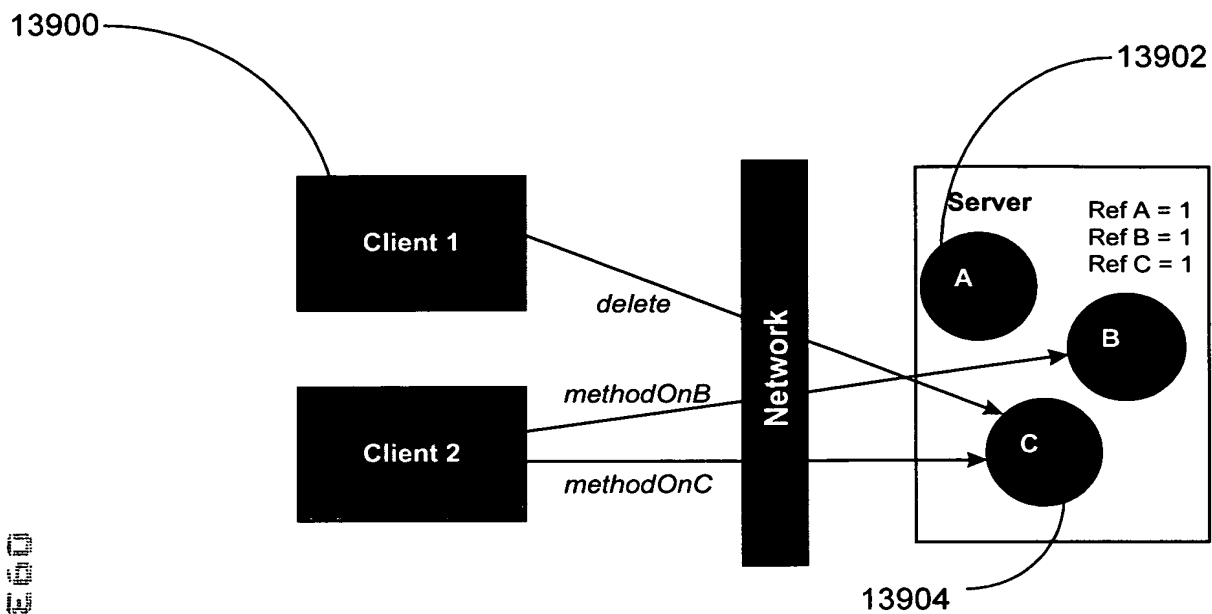


Figure 139

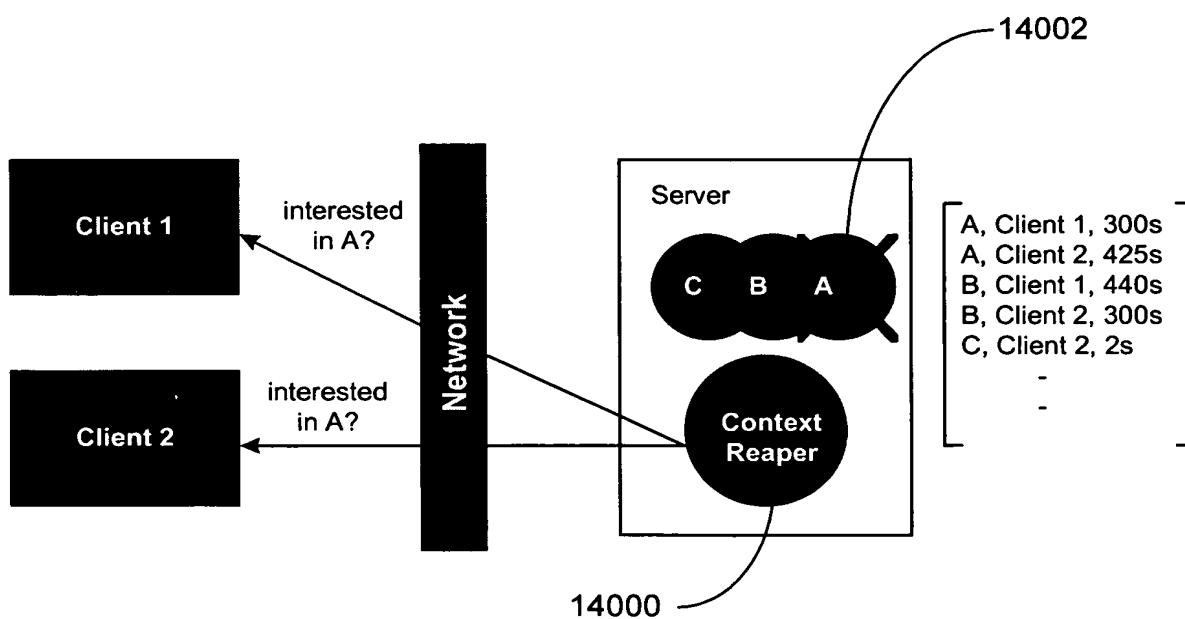


Figure 140

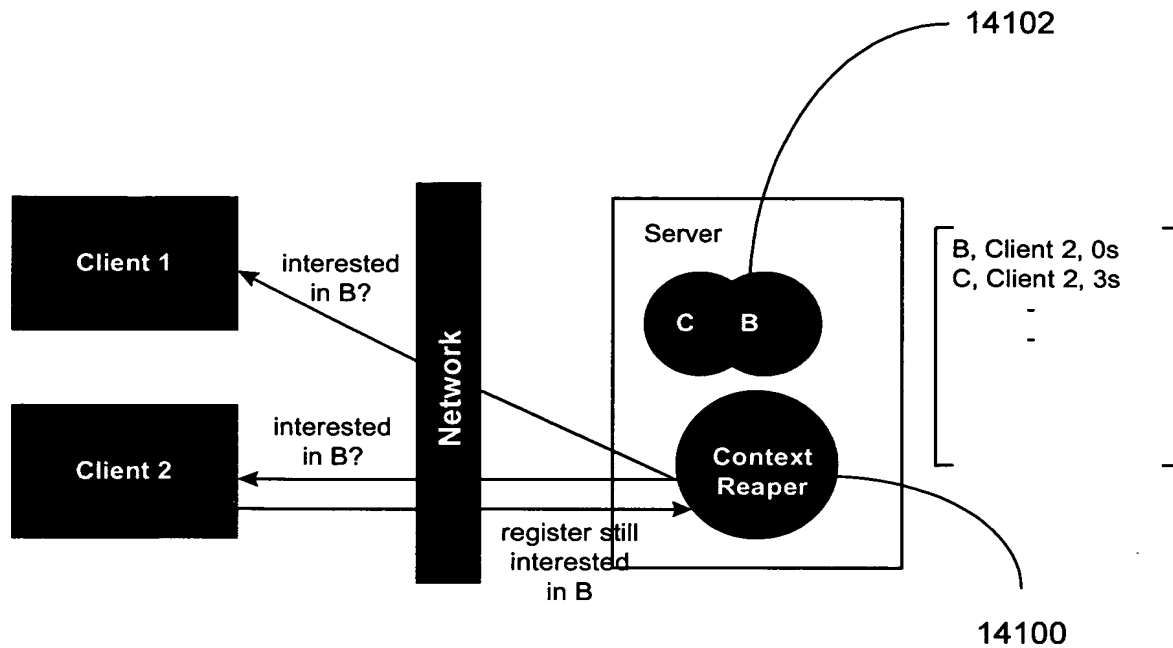


Figure 141

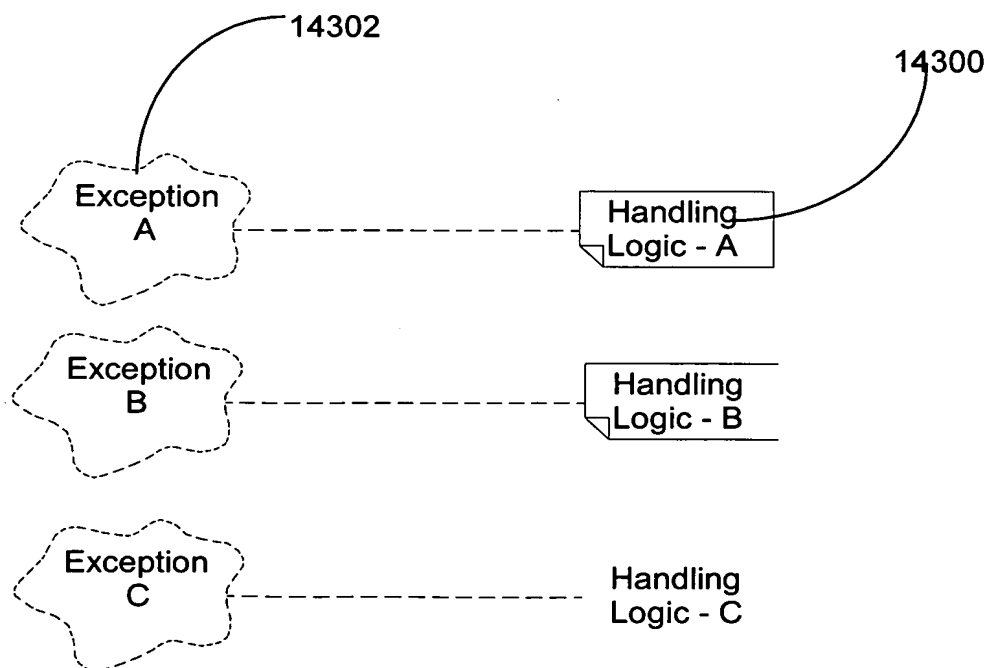


Figure 143

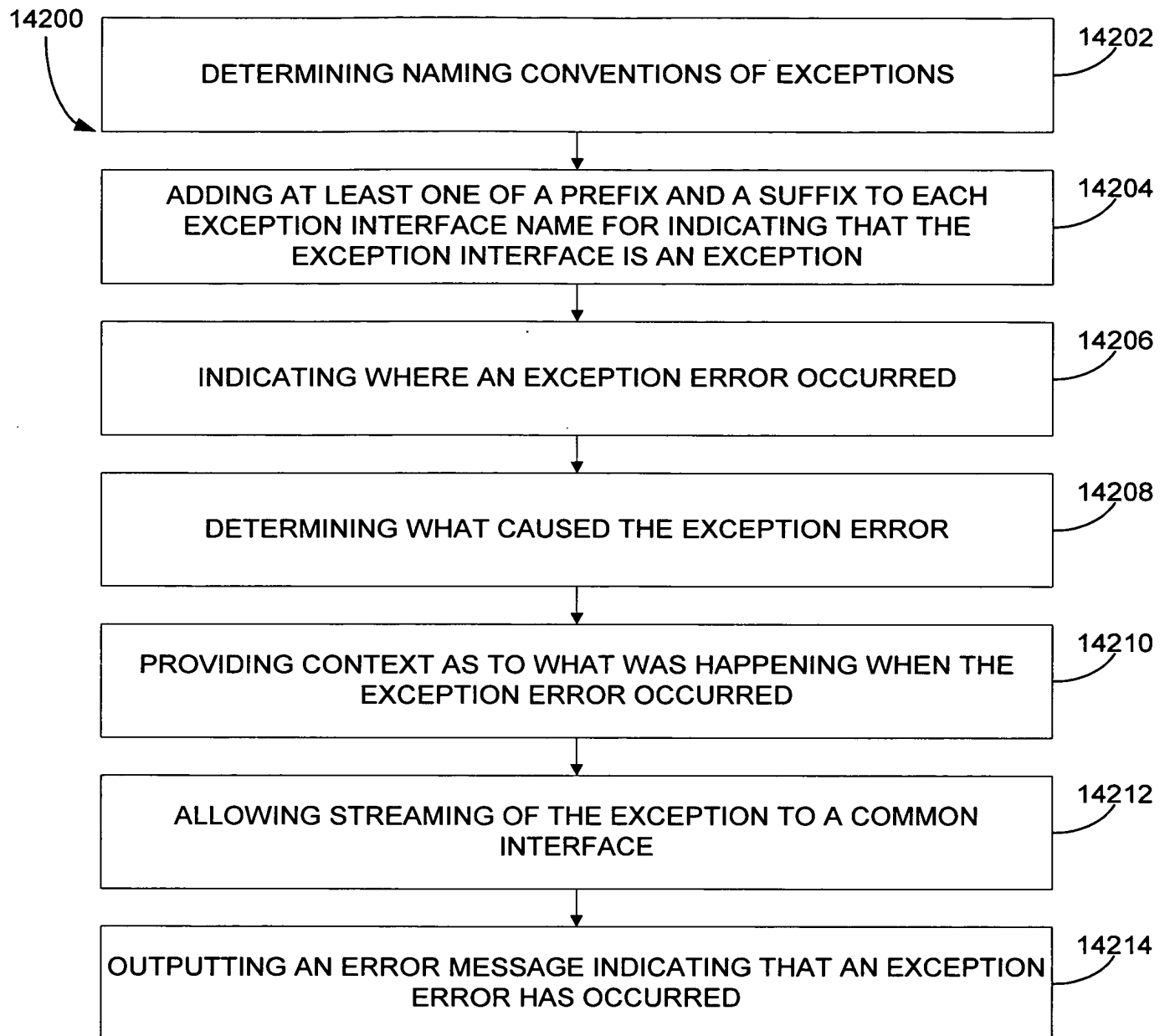


Figure 142

0938564-03169
66T680-45948860

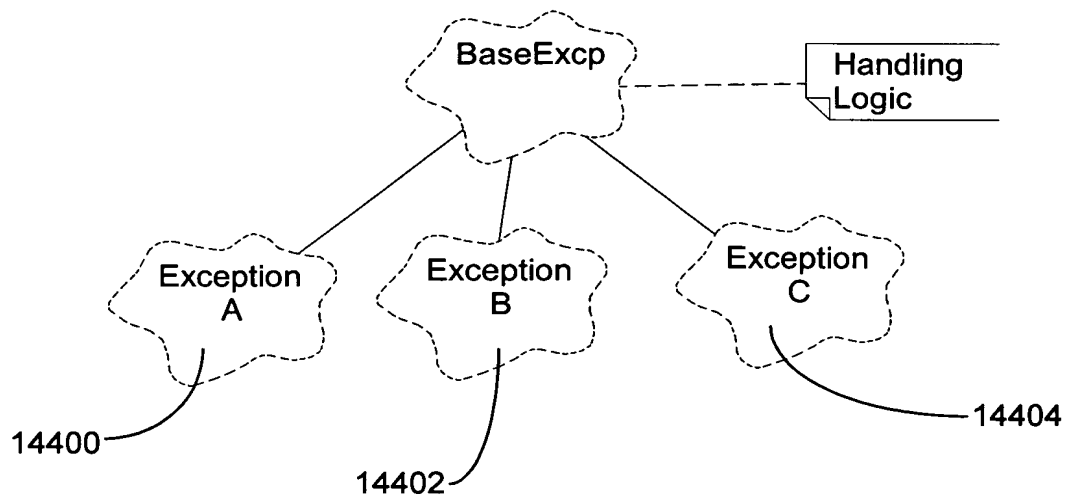


Figure 144

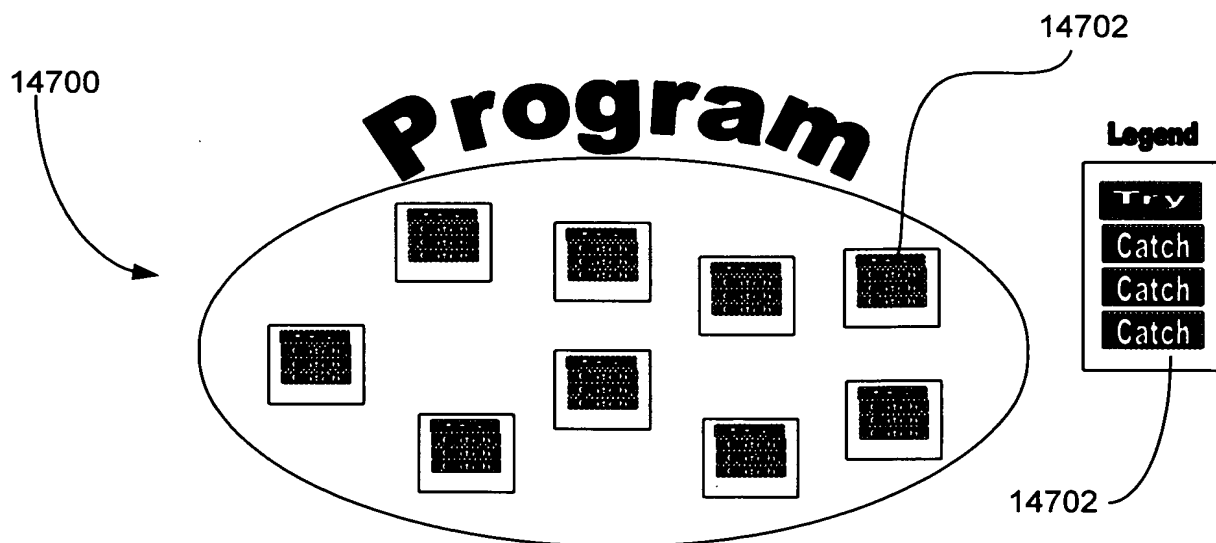


Figure 147

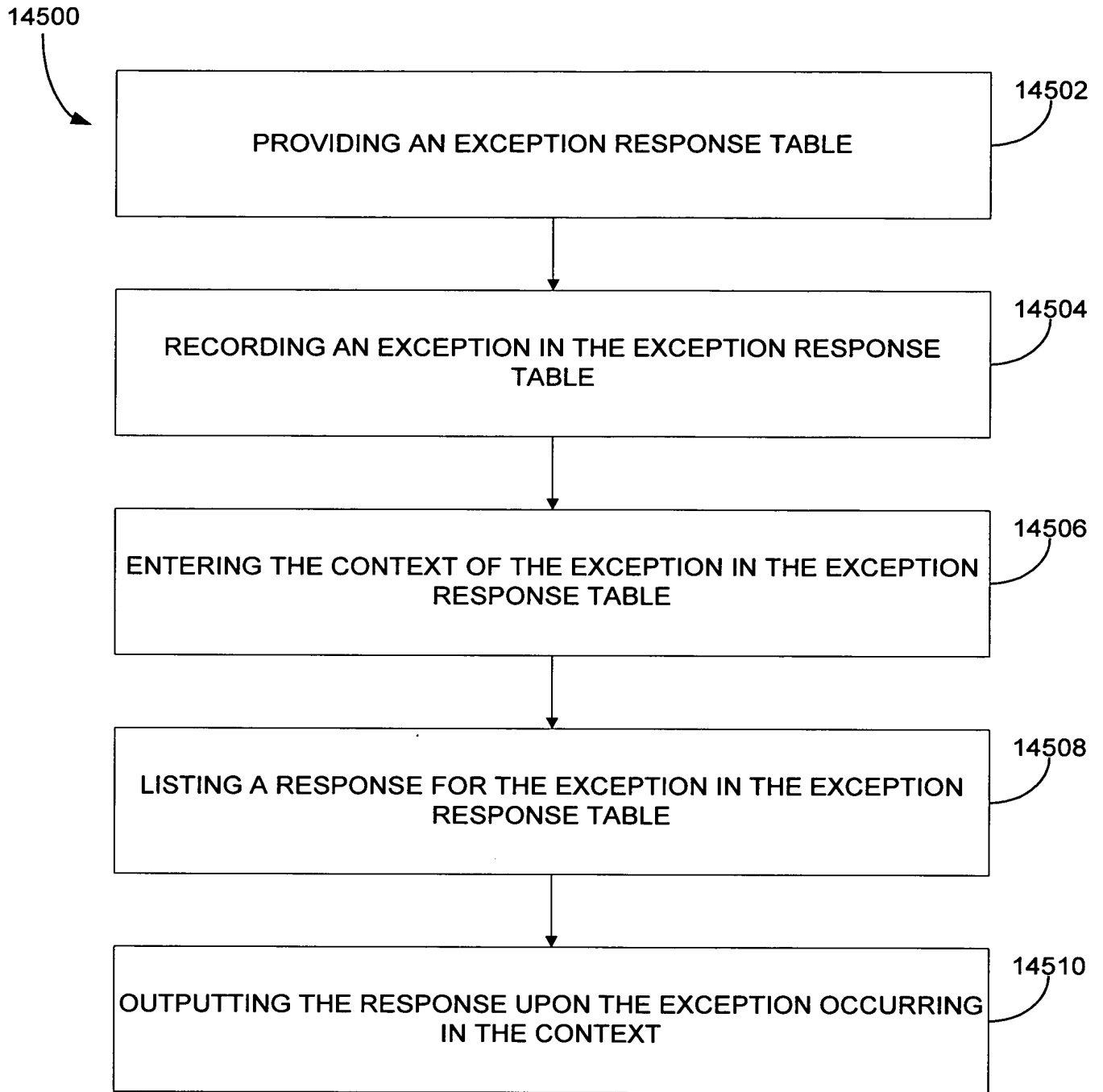


Figure 145

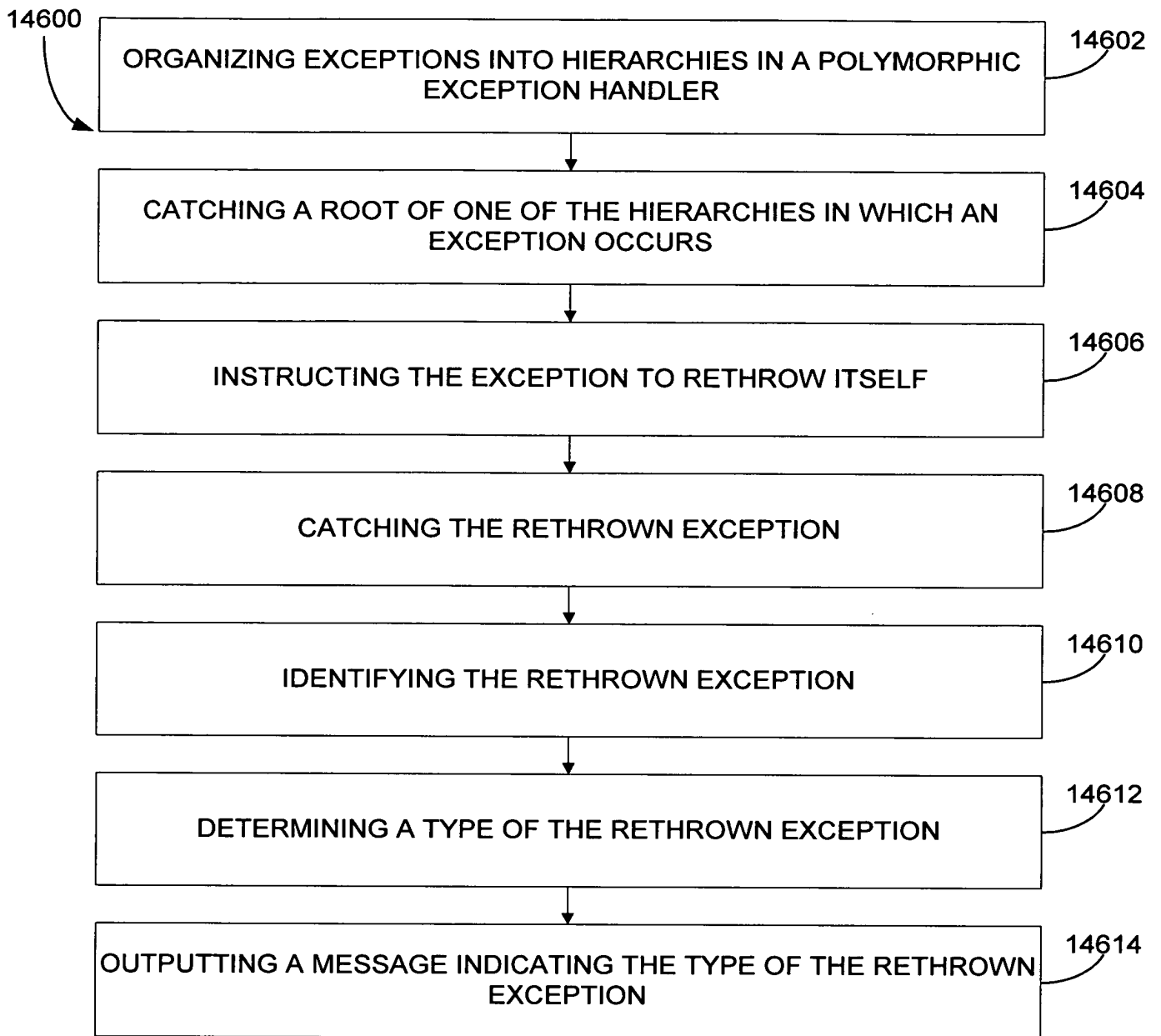


Figure 146



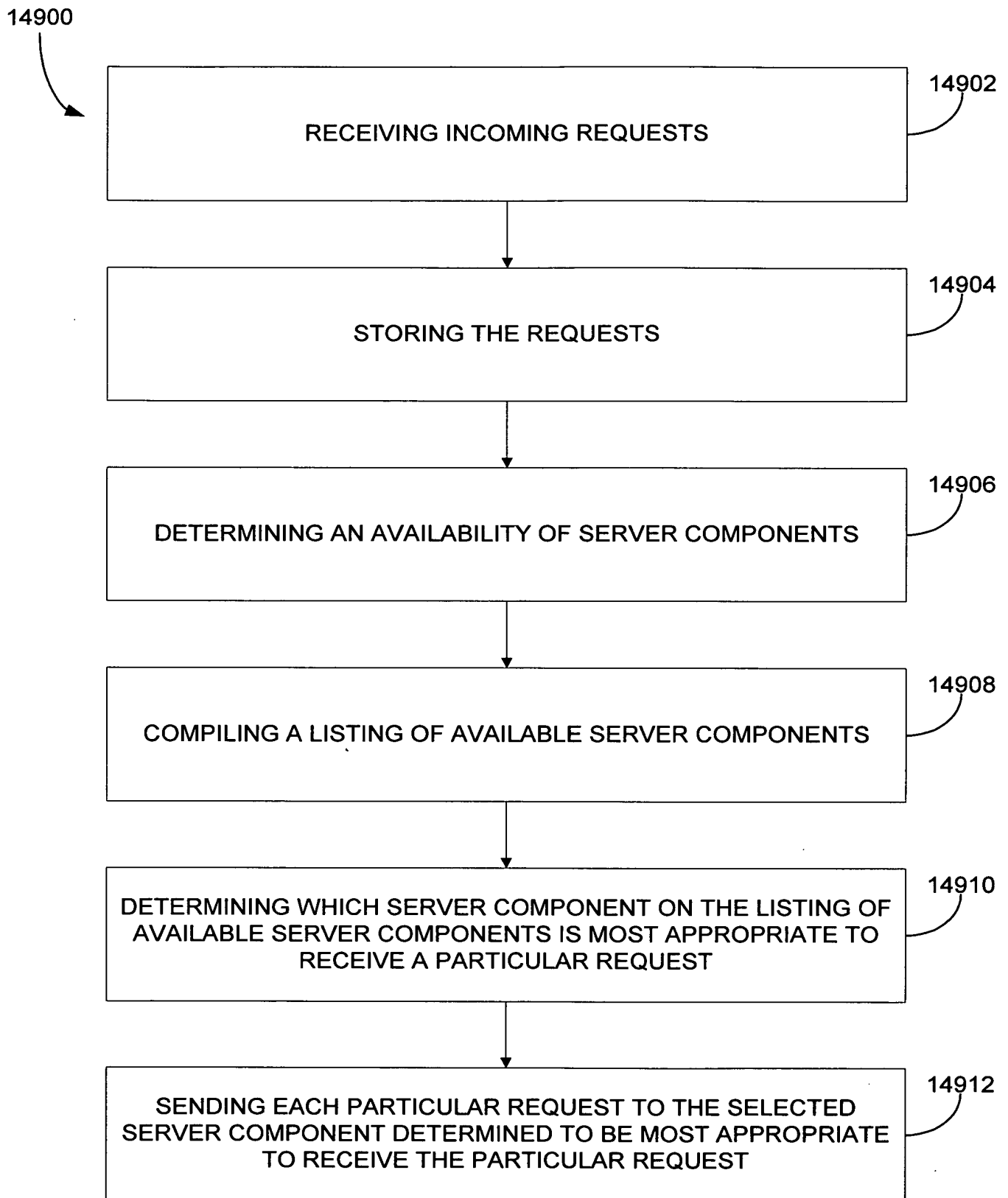


Figure 149

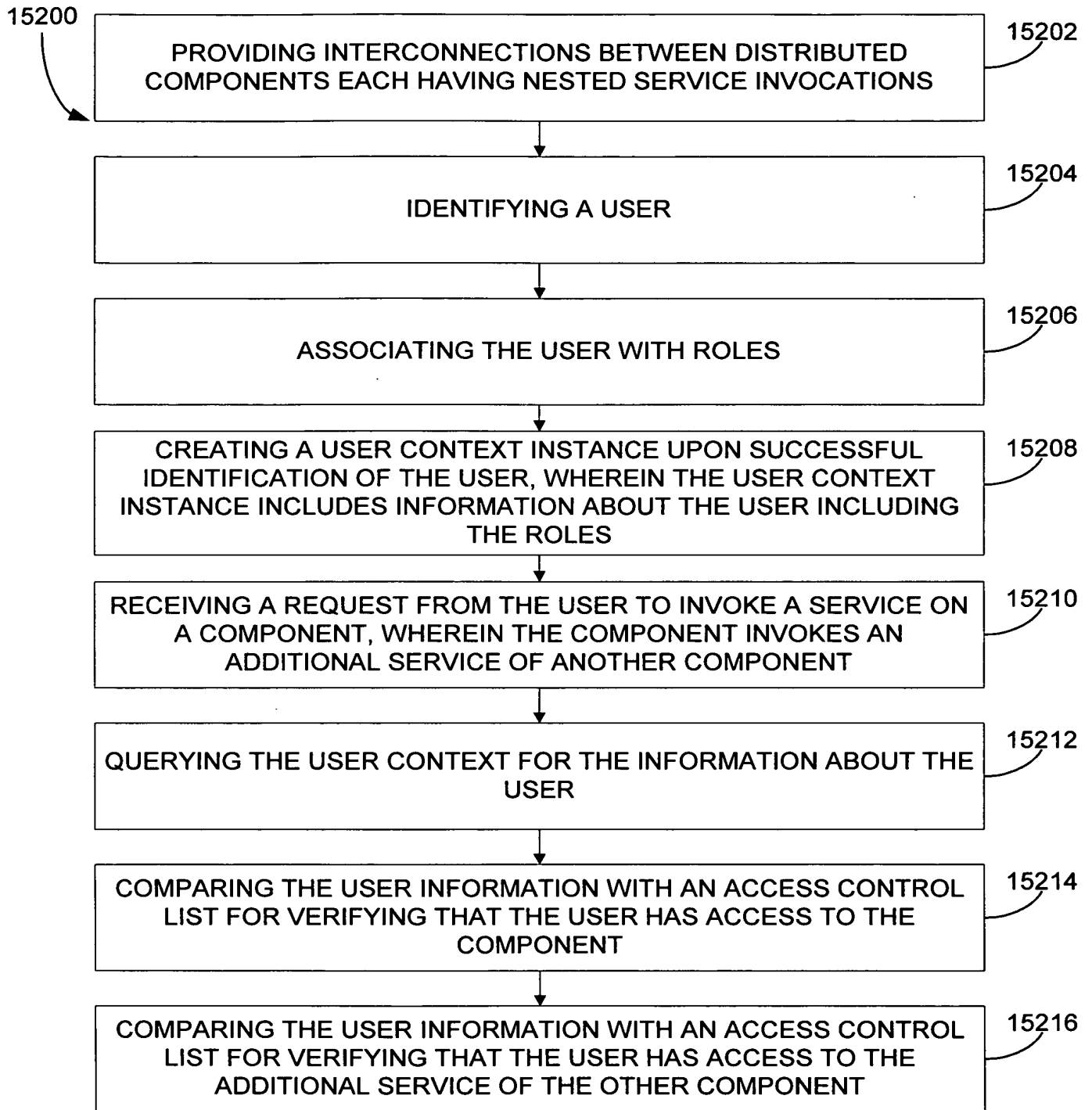


Figure 152

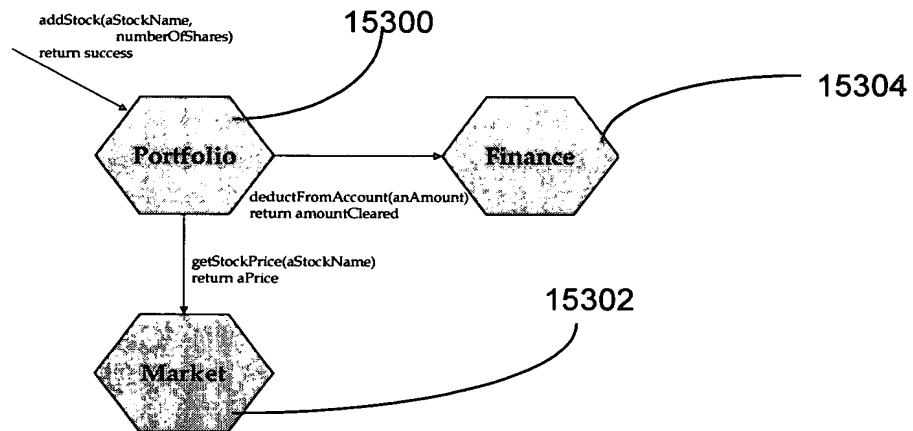


Figure 153

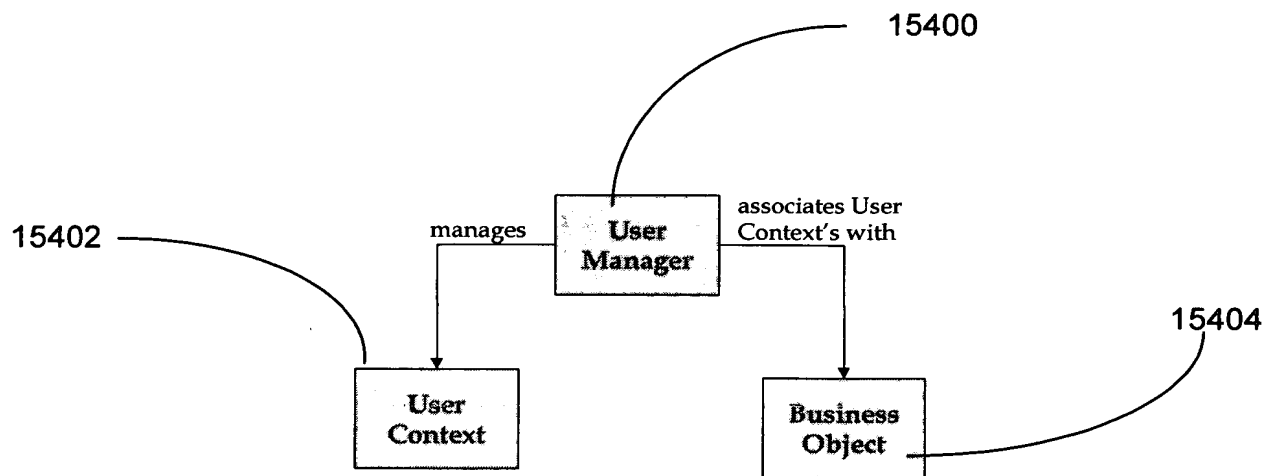


Figure 154

15500

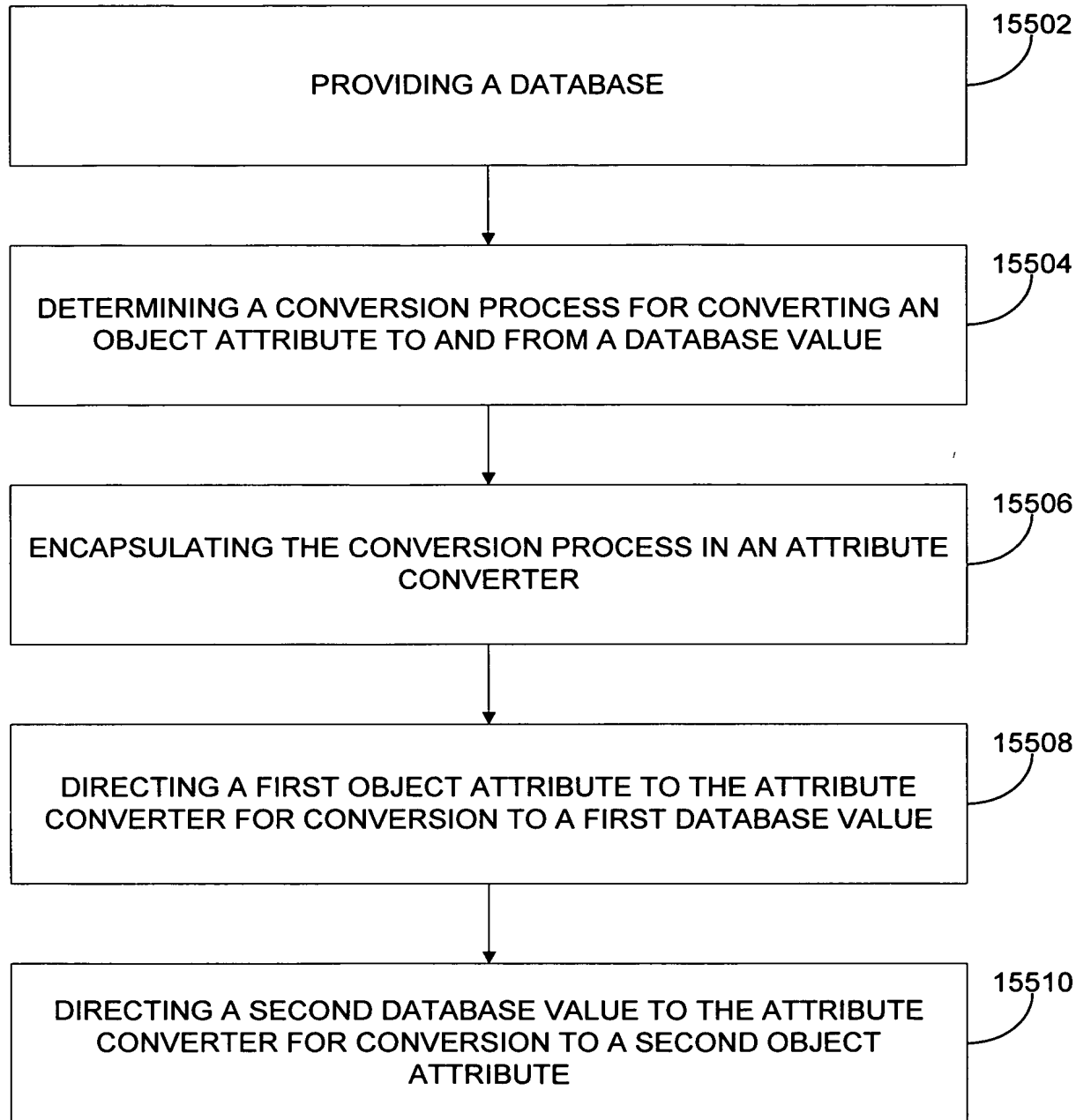


Figure 155

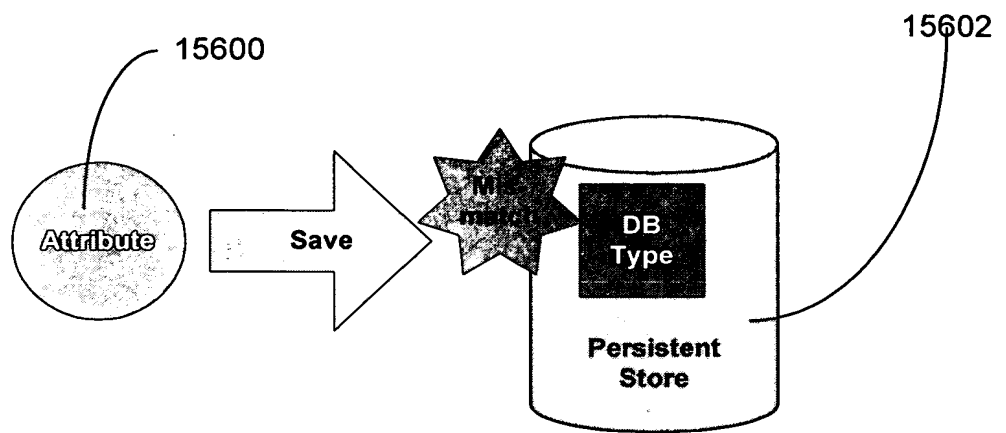


Figure 156

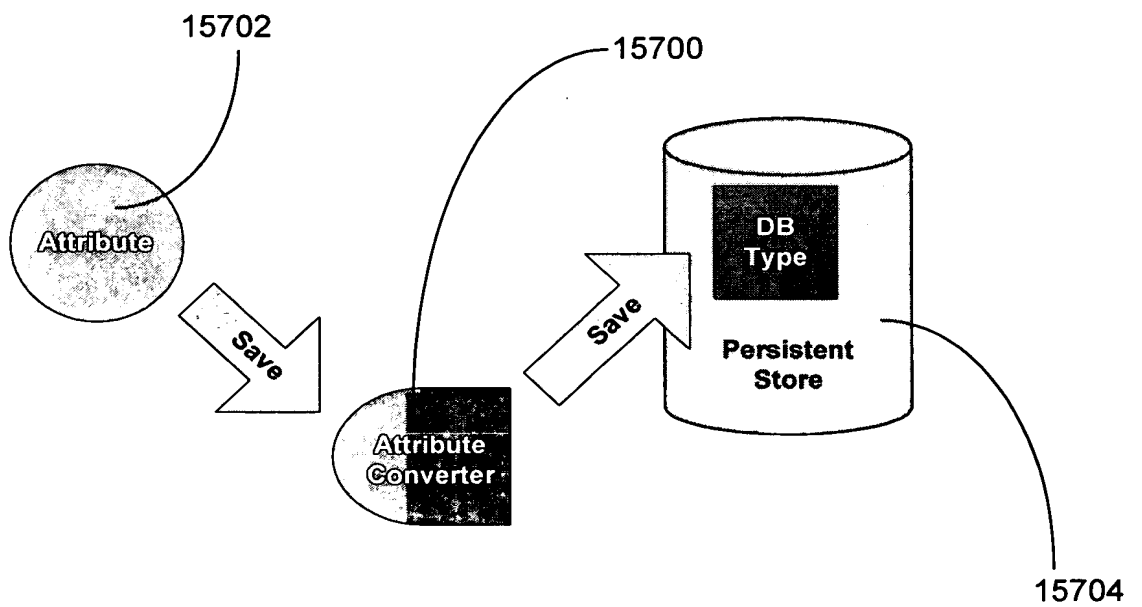


Figure 157

15800

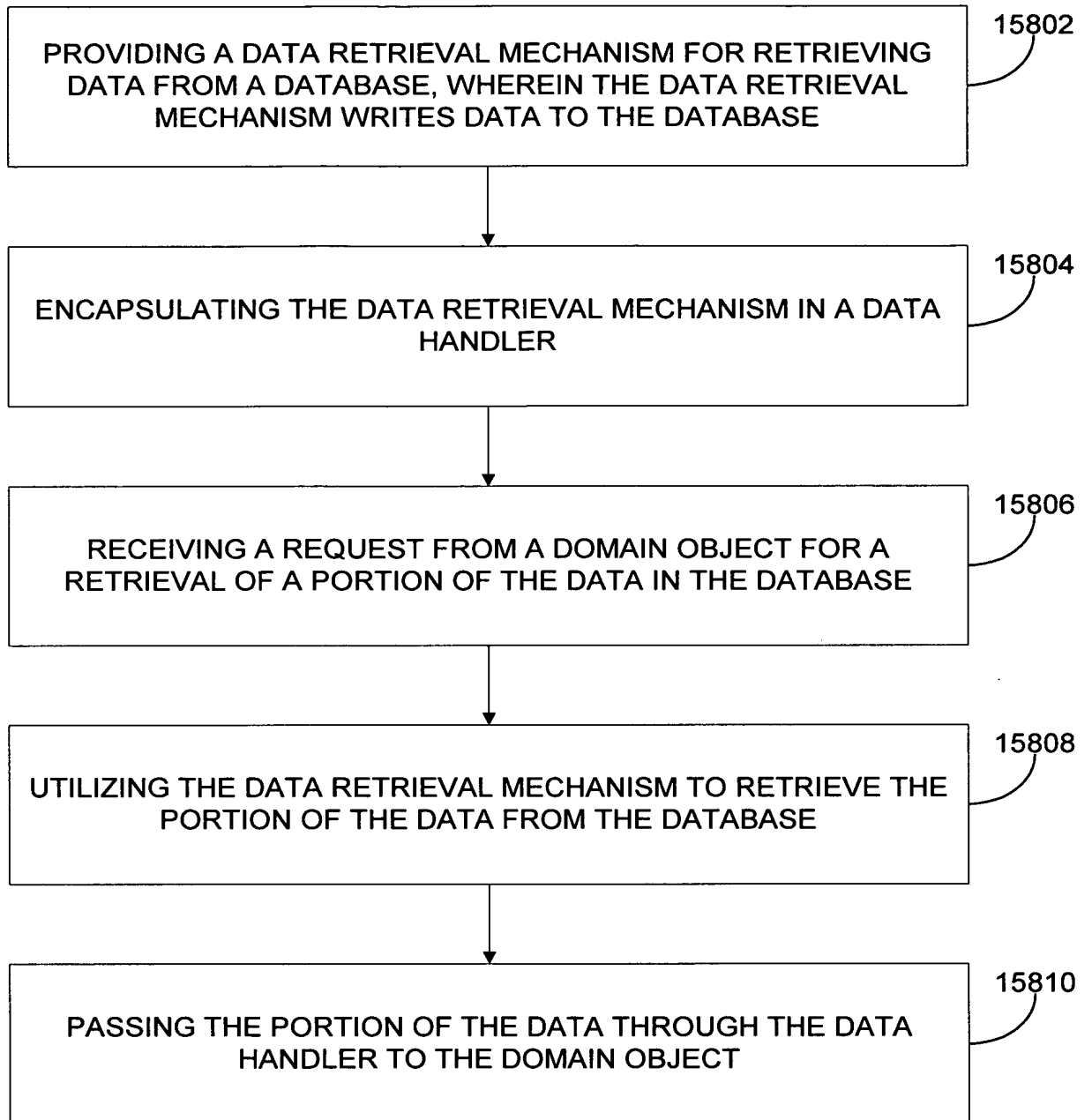


Figure 158

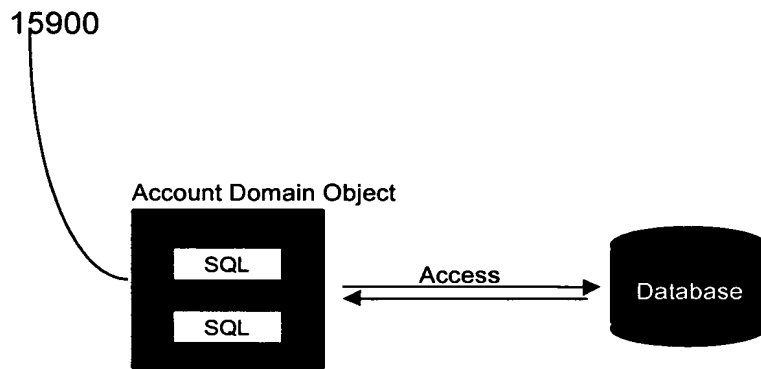


Figure 159

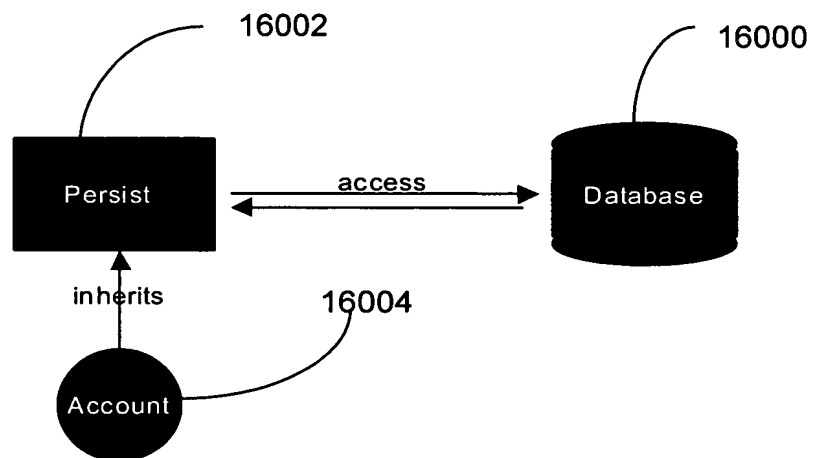


Figure 160

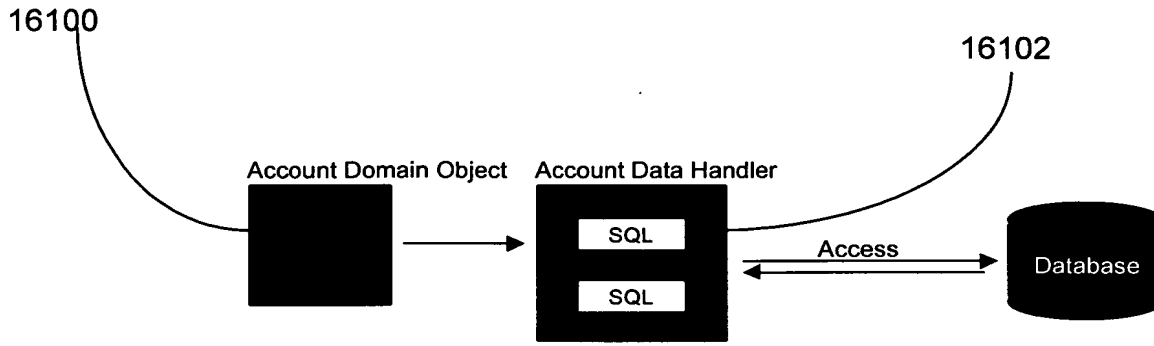


Figure 161

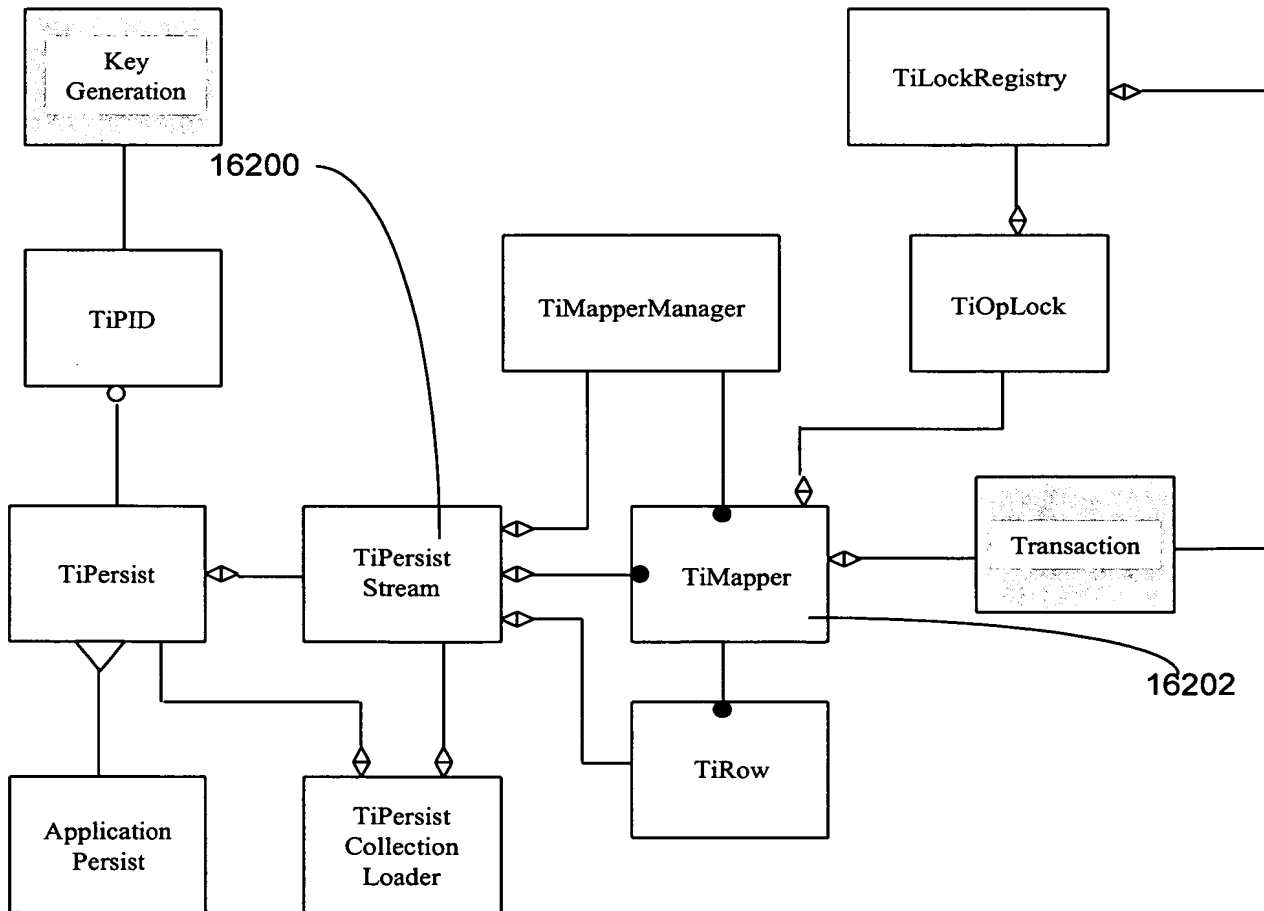


Figure 162

16300

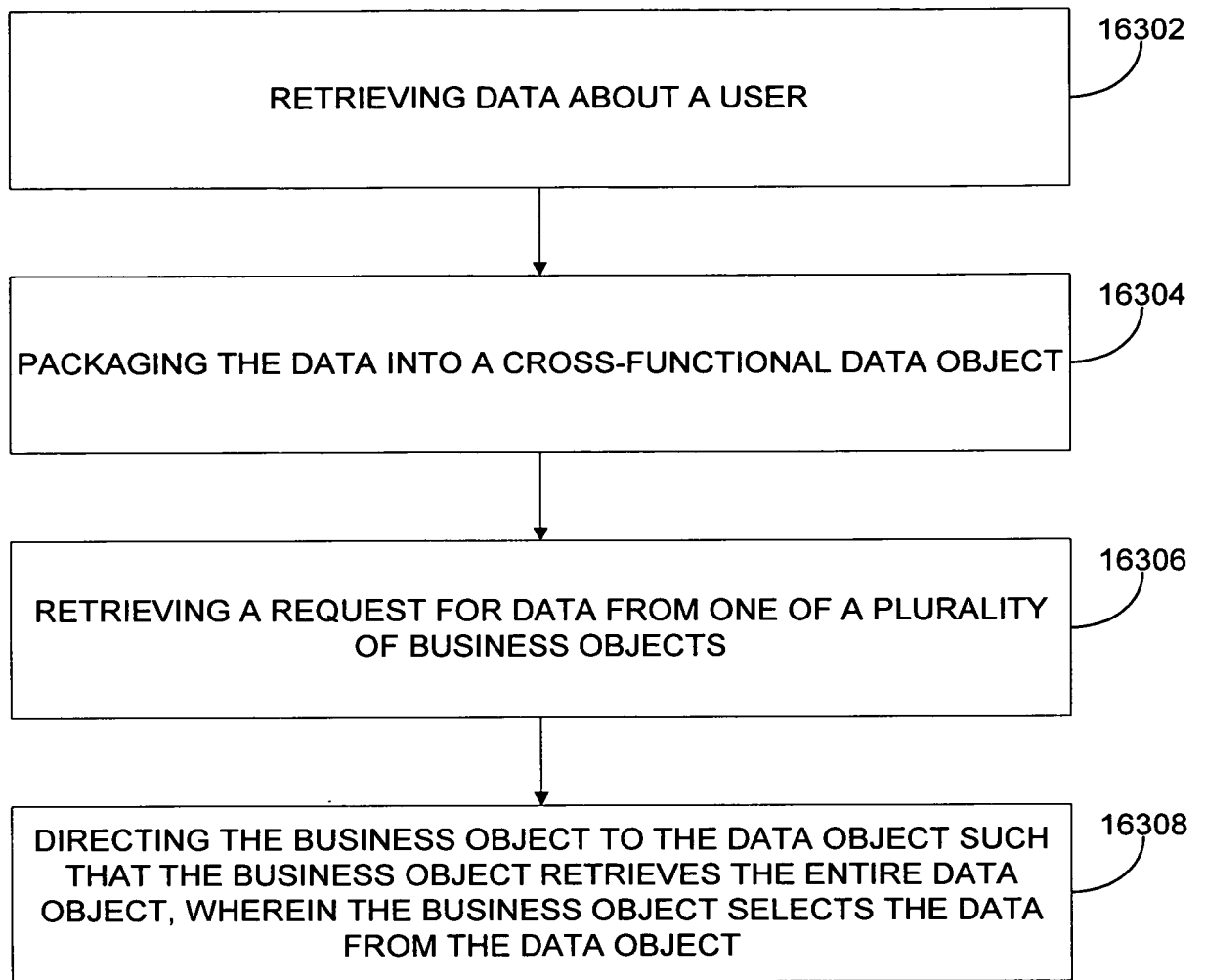
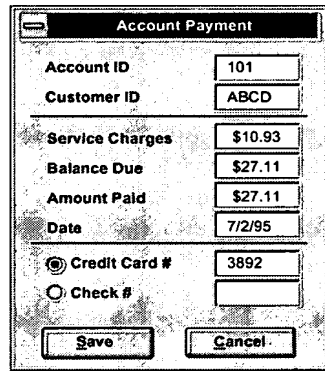


Figure 163



16600

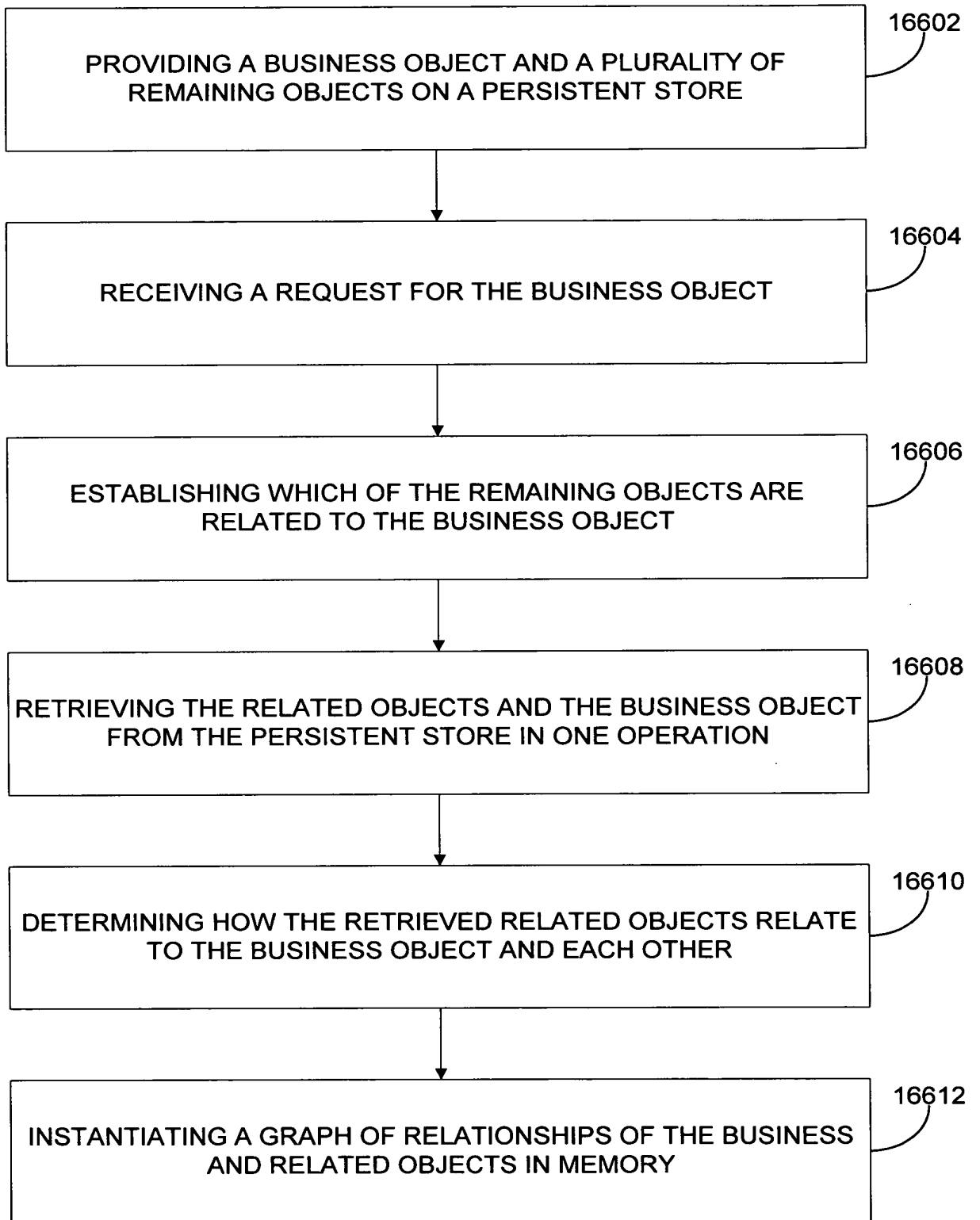


Figure 166

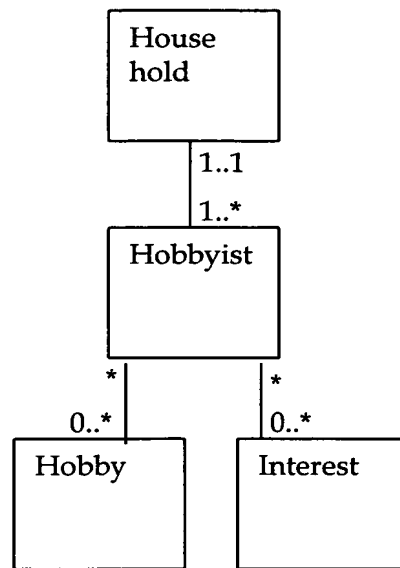


Figure 167

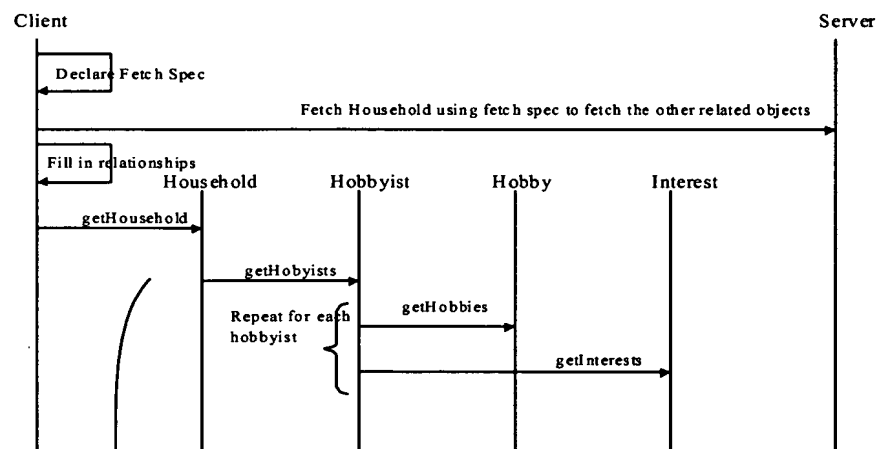


Figure 168

```
sequenceDiagram
    participant Client
    participant DB
    participant Cache
    Client->>DB: Select * from Customer where custID = 123
    DB-->>Cache: 3. Return 123
    Cache->>Cache: 4. Insert customer123 in the cache
    Cache-->>Client: Return customer 123
```

Figure 172

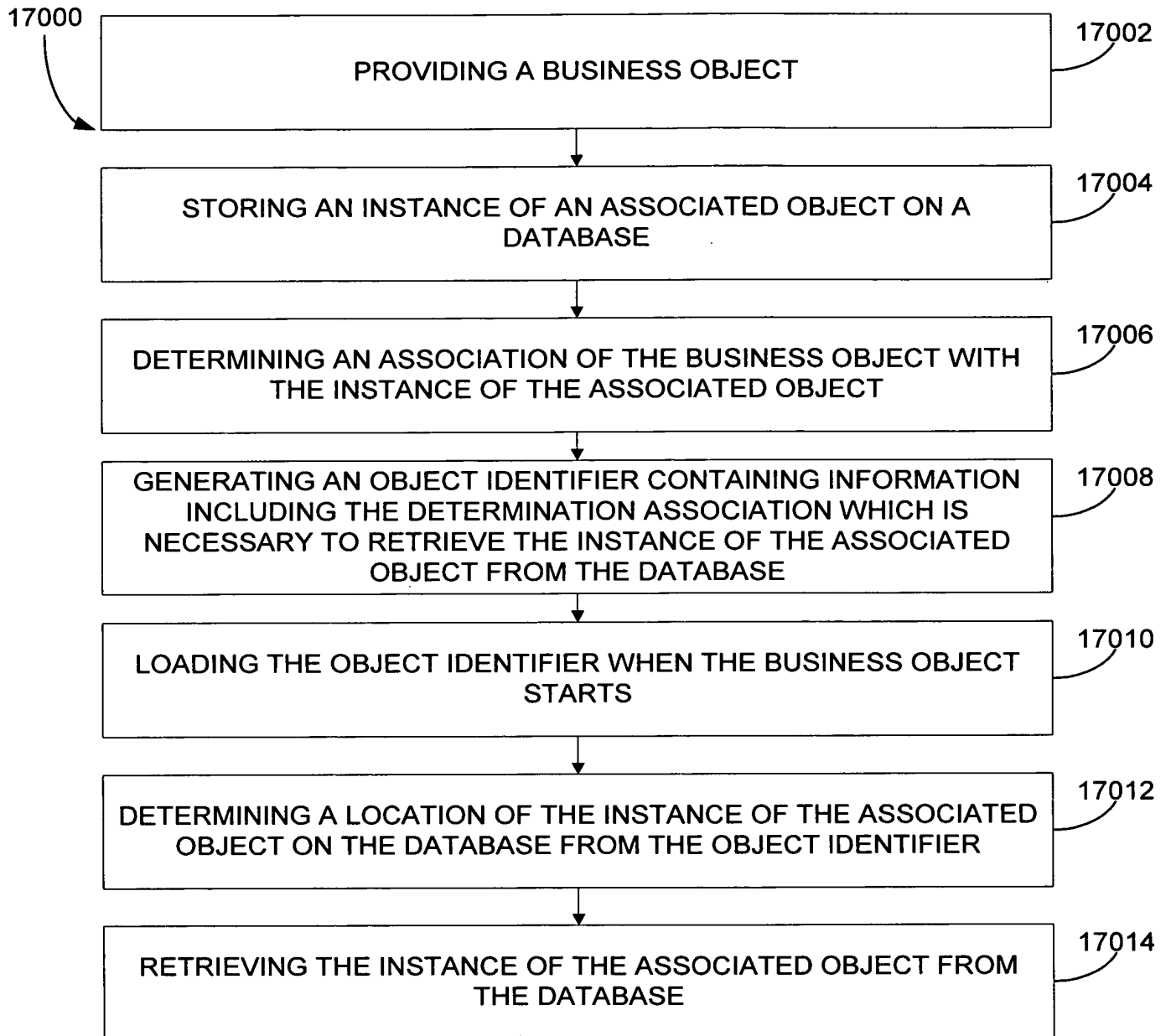


Figure 170

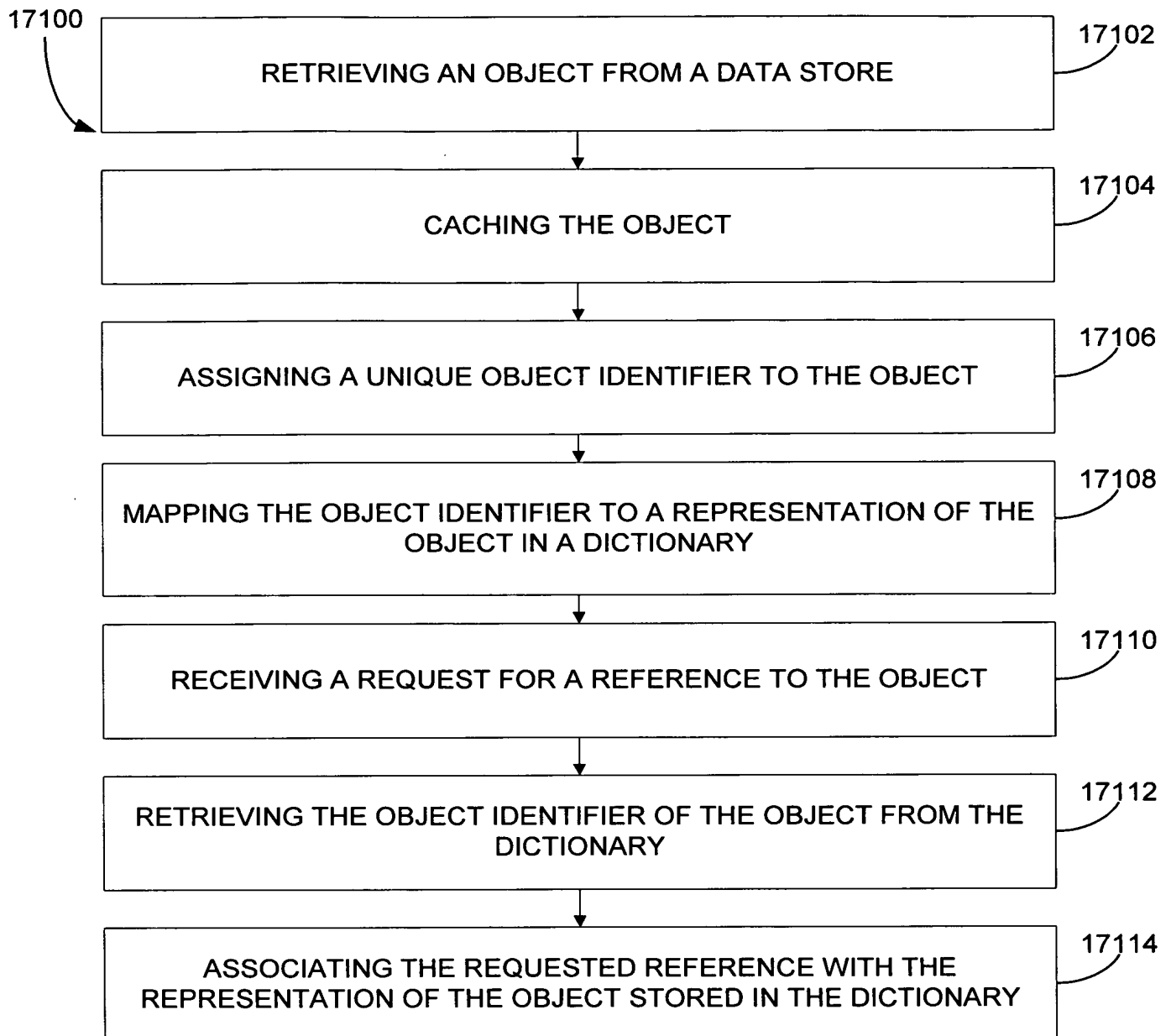


Figure 171

17300

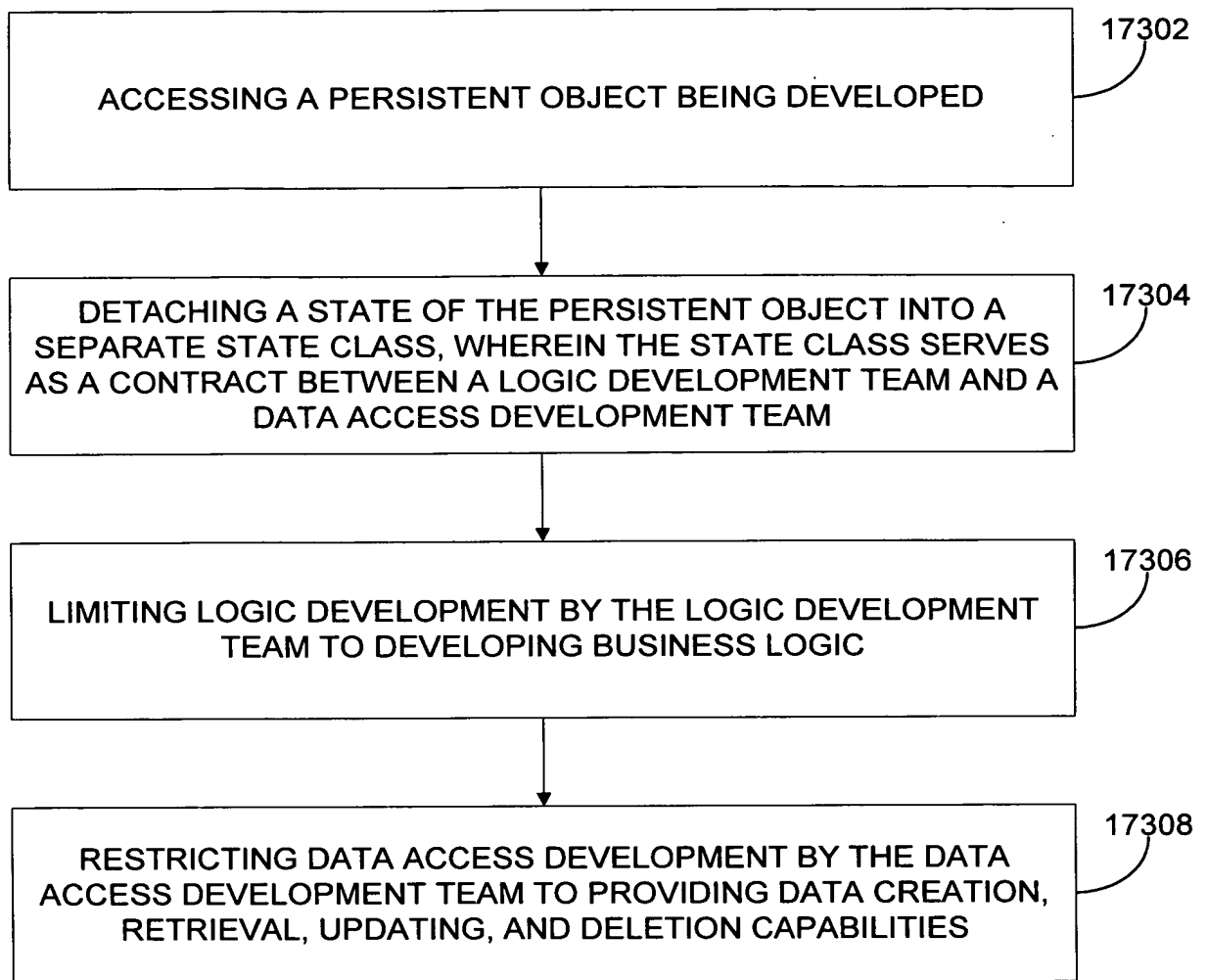


Figure 173

17400

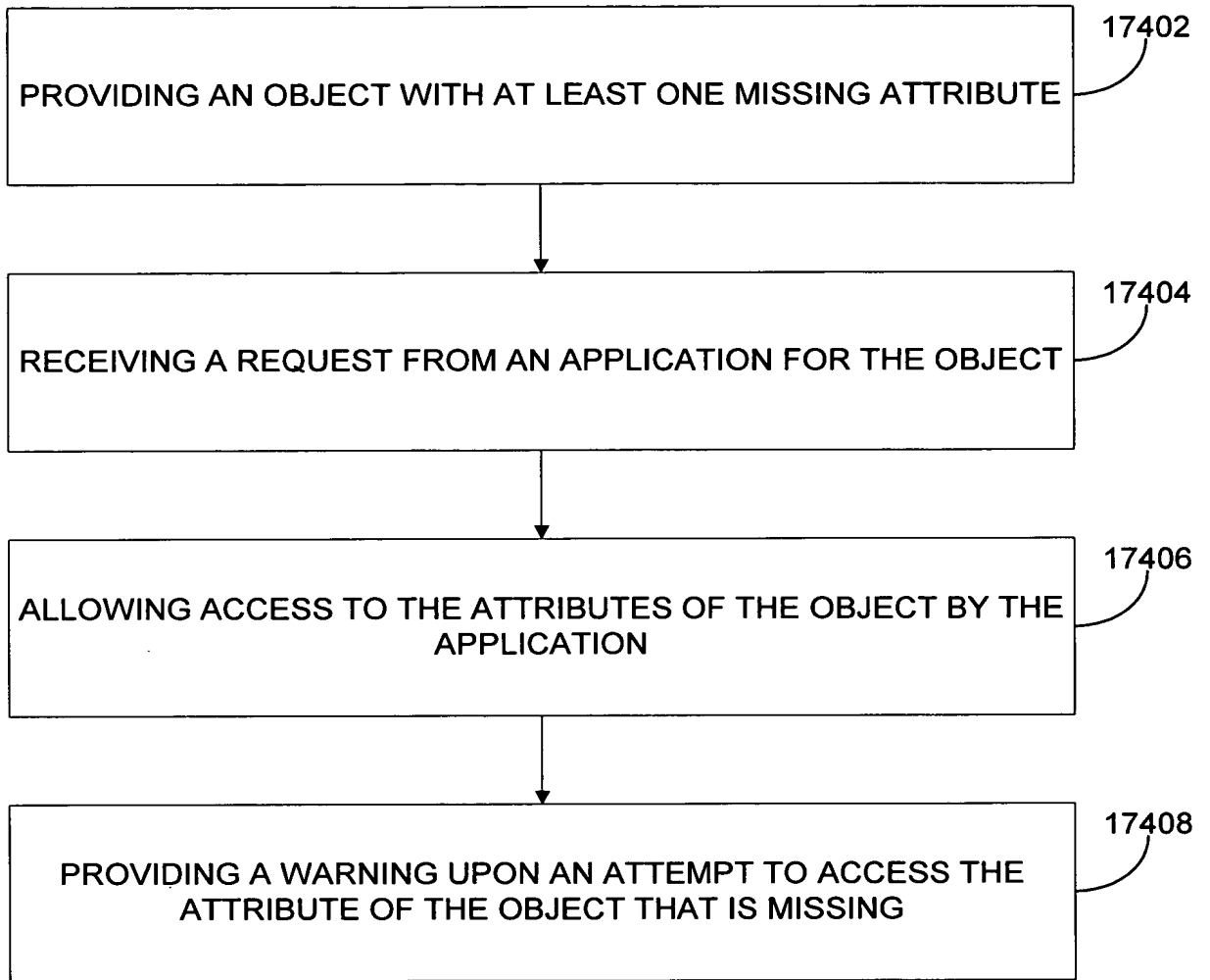
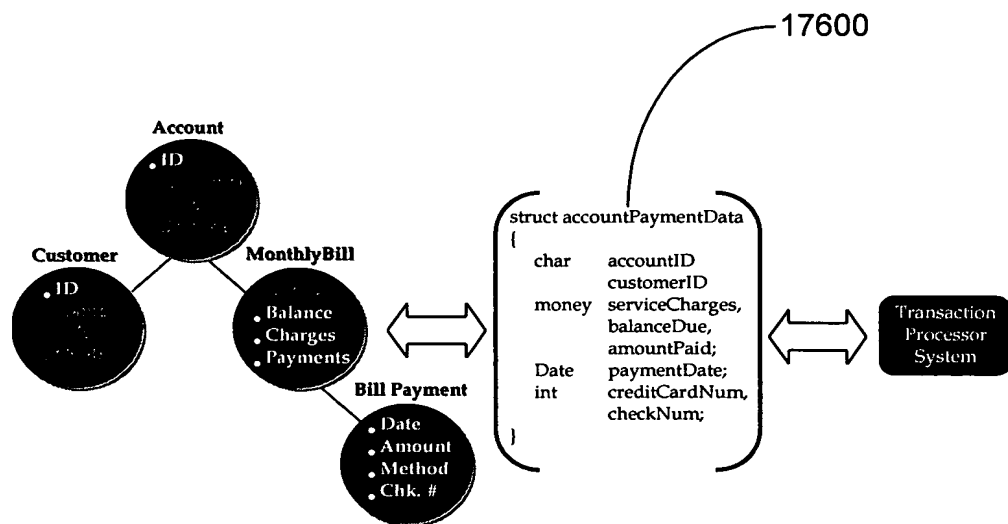
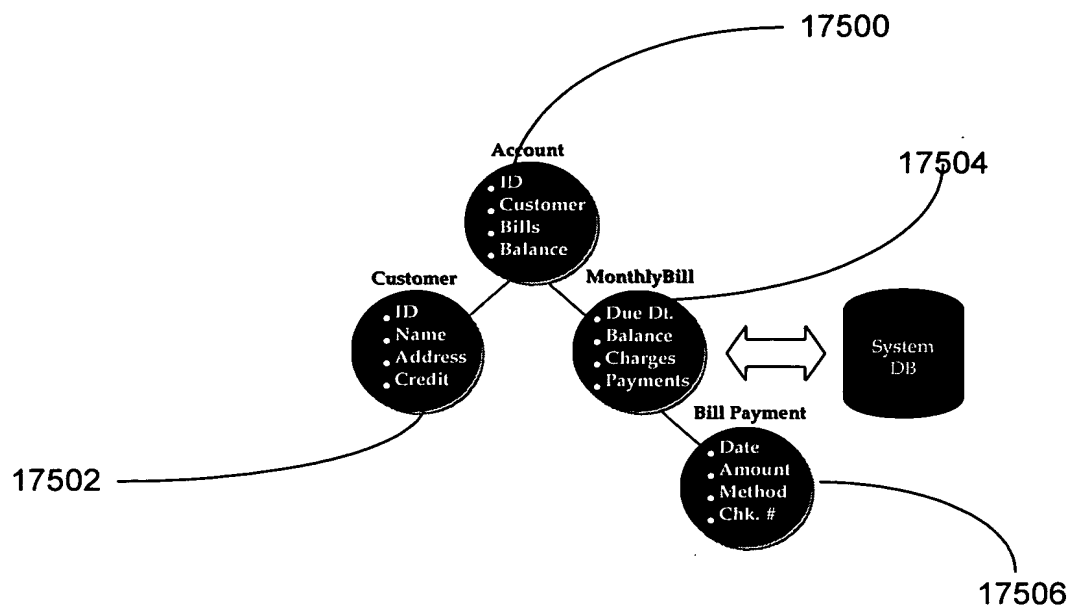


Figure 174



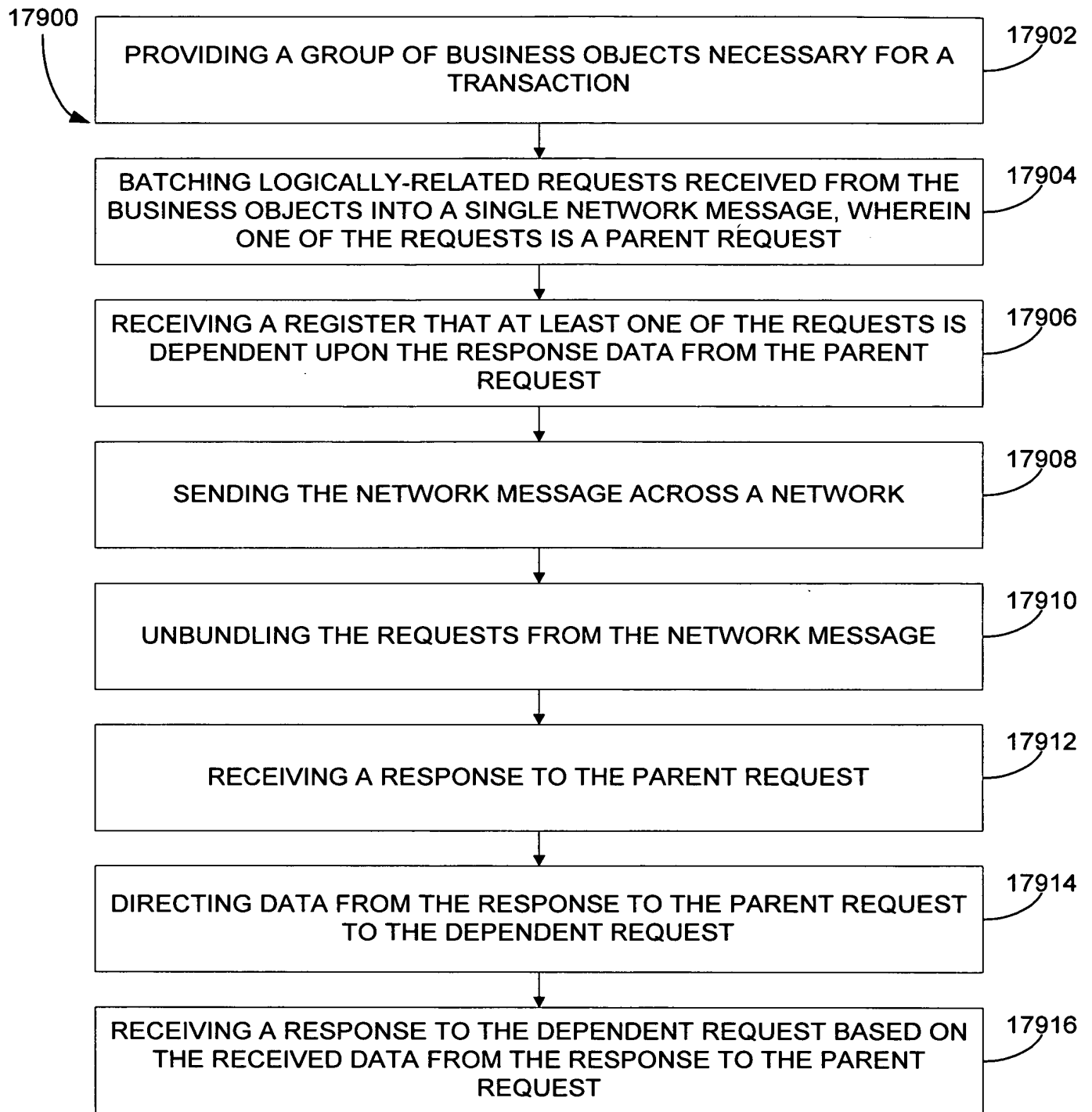


Figure 179

```

graph LR
    A((Account Id 101))
    C((Customer Id ???))
    M((Monthly Bill Id 274))
    R((Request Batcher))
    A -- "1. retrieve" --> A
    C -- "2. retrieve" --> C
    M -- "3. retrieve" --> M
    A -- "4. depend on" --> R
    C -- "4. depend on" --> R
    R -- "5. Send Transaction:" --> Out[ ]
    style Out fill:none,stroke:none
    subgraph 5a [5. Send Transaction:]
        direction TB
        A5a["a. Account 101  
and dependent Customer"]
        B5a["b. Monthly Bill 274"]
    end
    
```

Figure 181

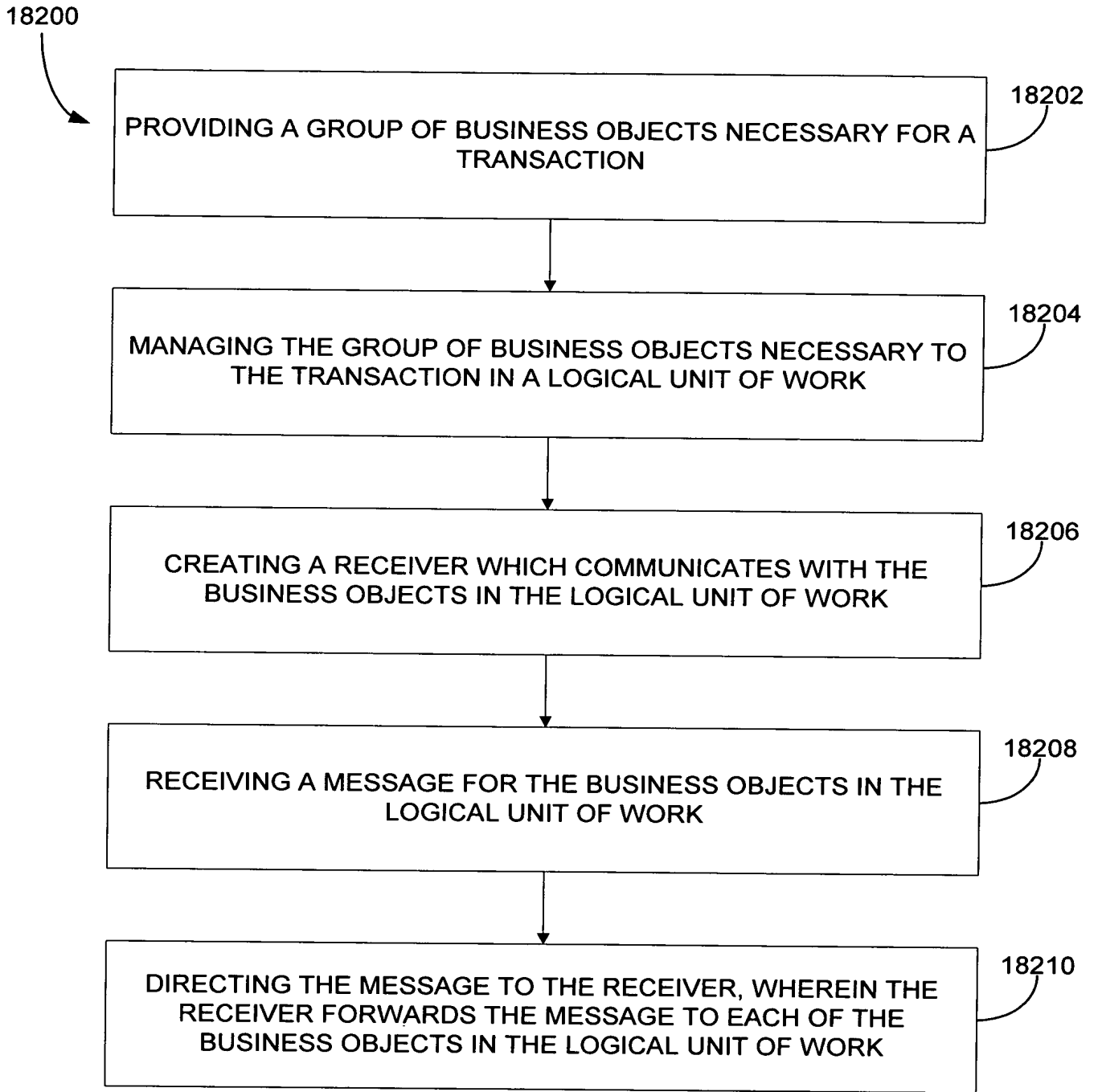
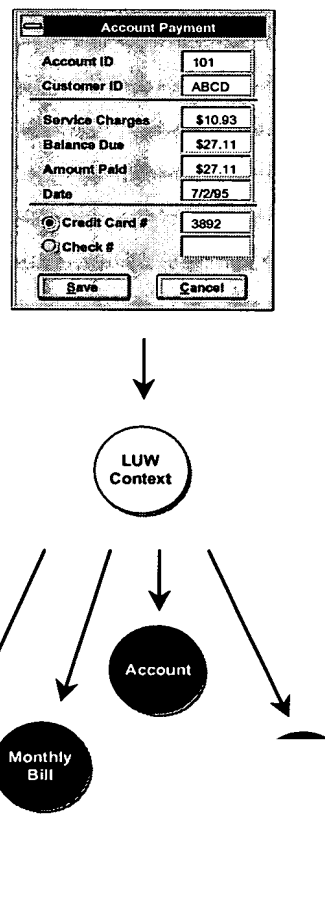


Figure 182



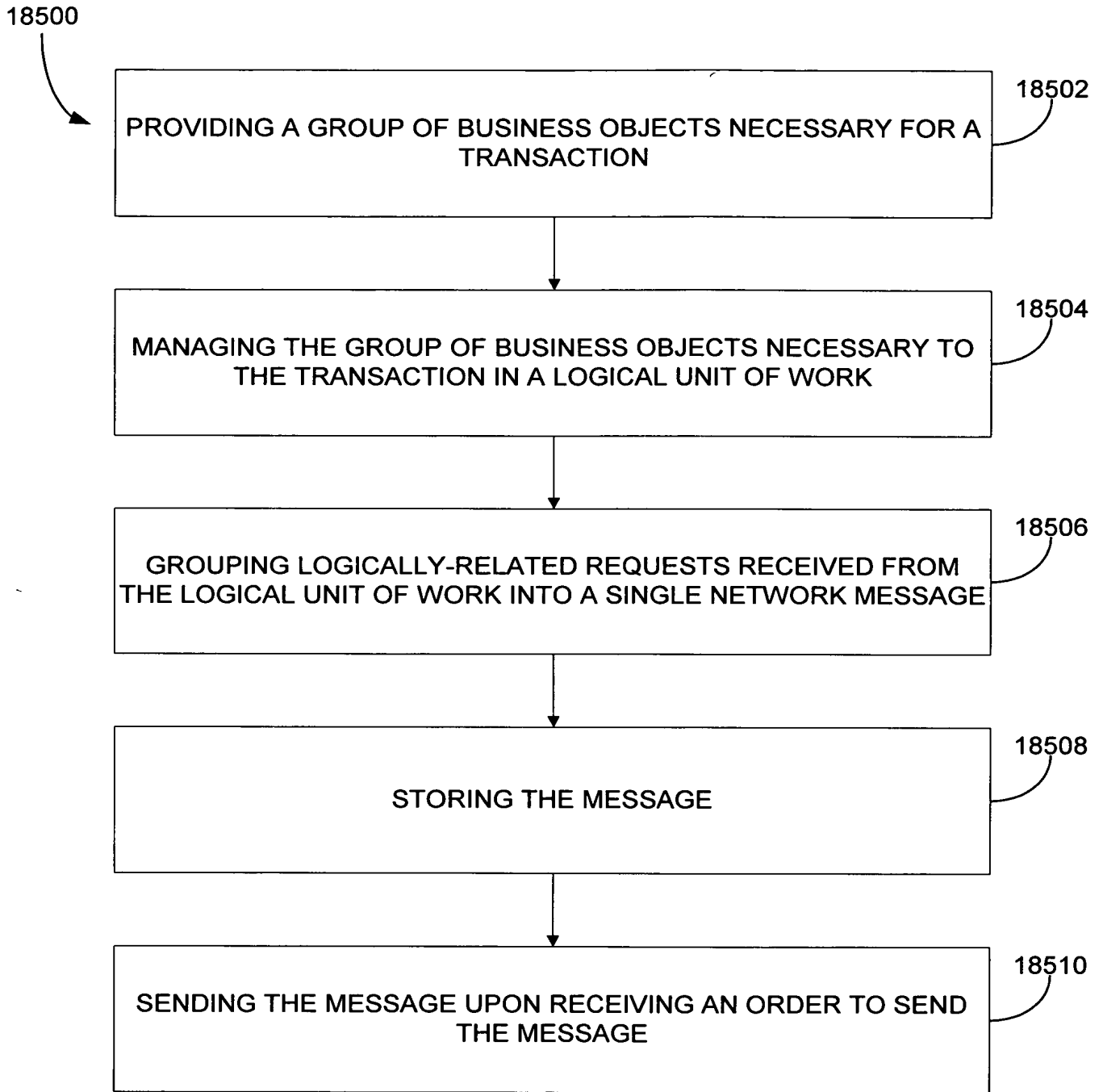


Figure 185

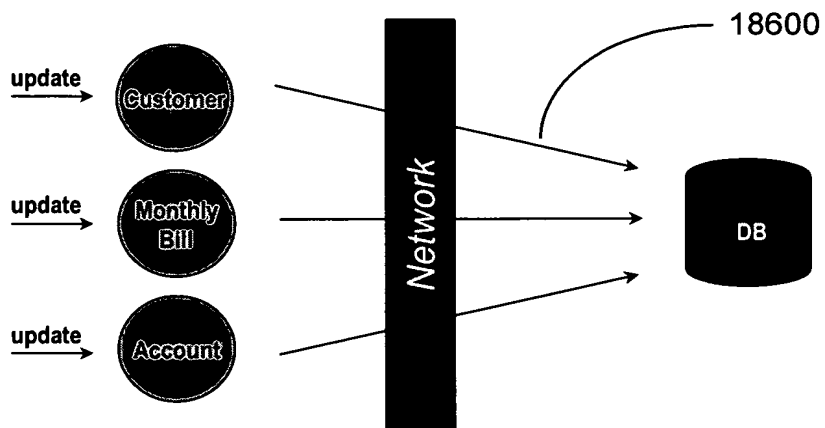


Figure 186

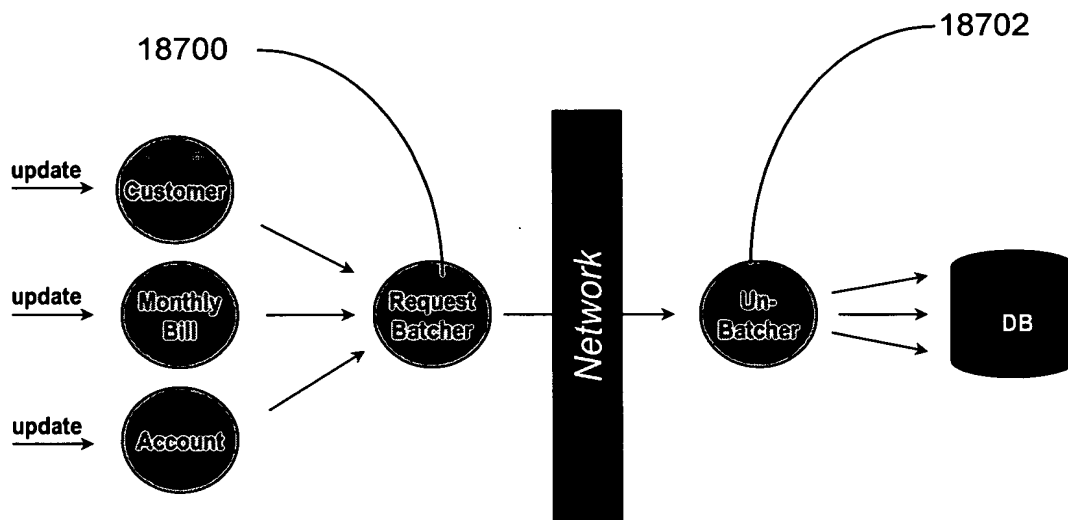


Figure 187

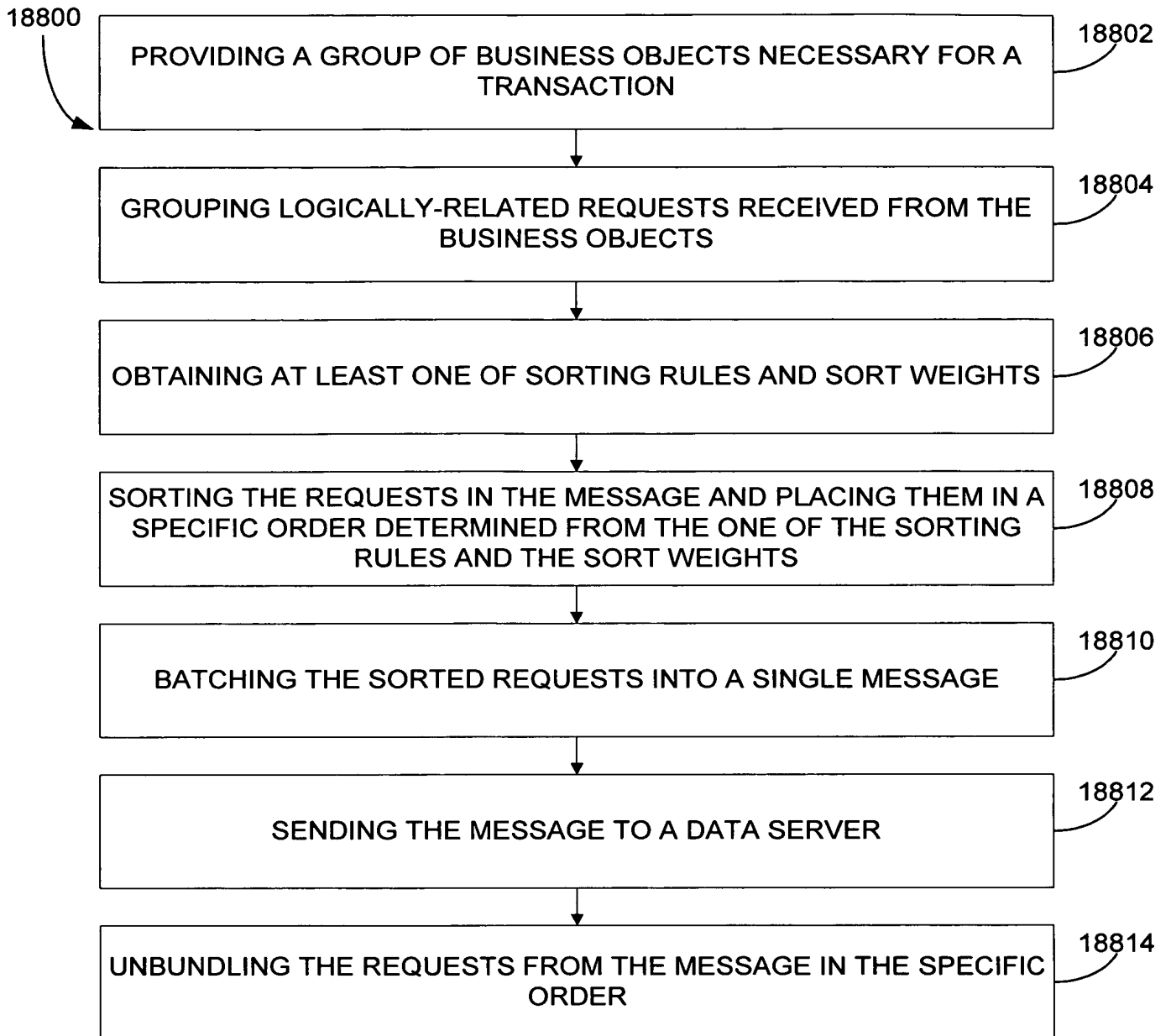


Figure 188

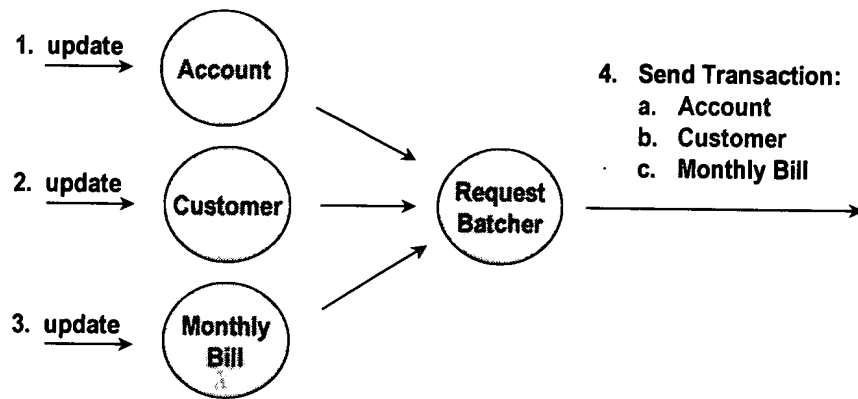


Figure 189

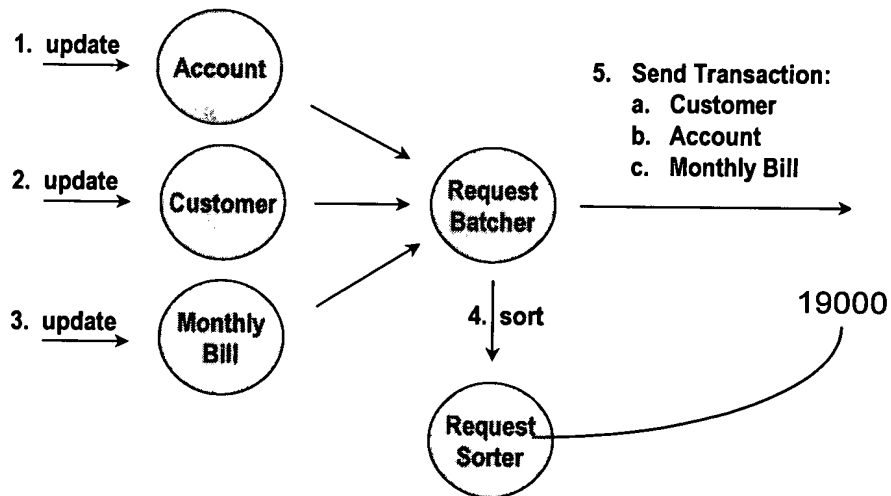


Figure 190

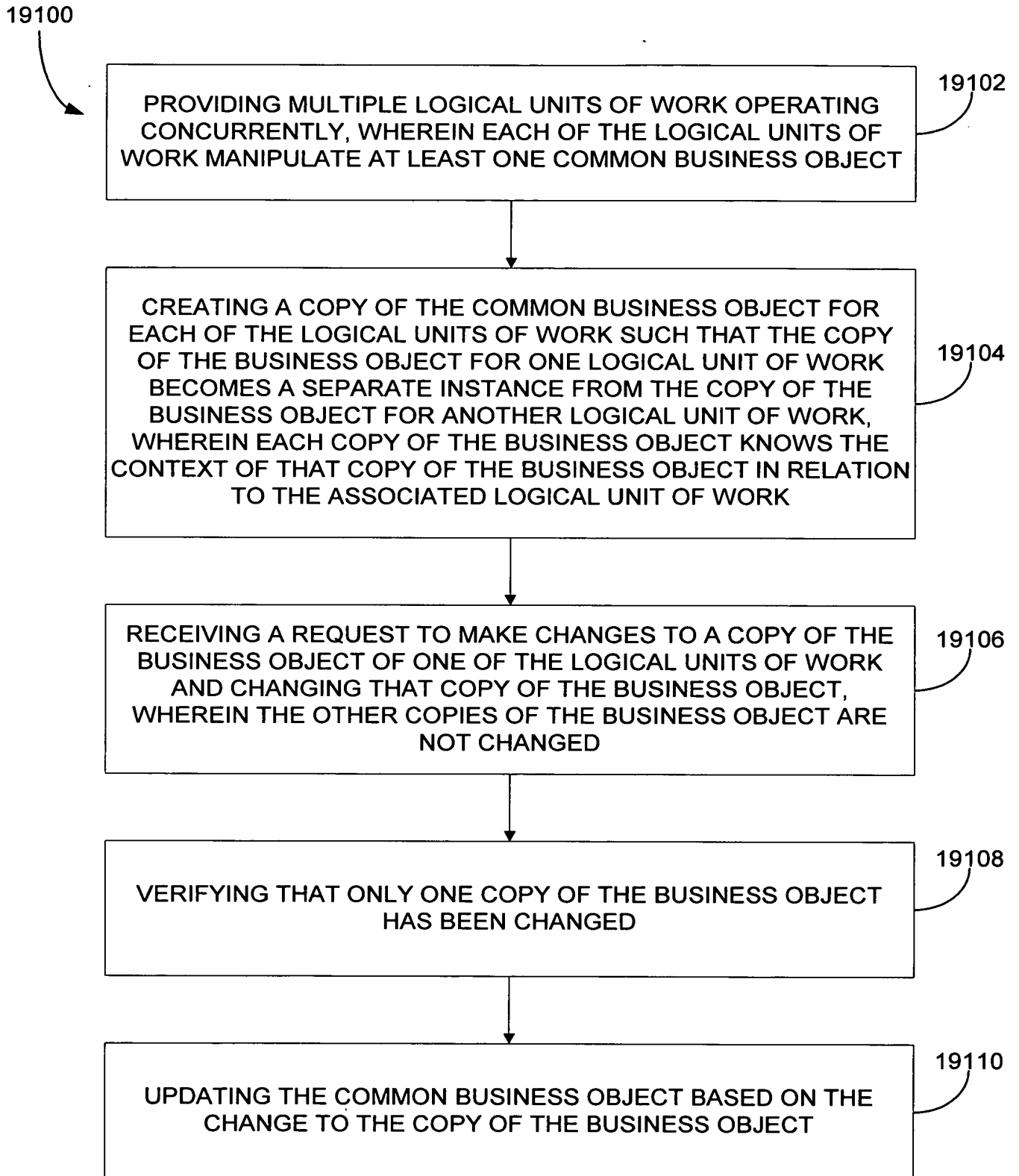


Figure 191

19400

19402

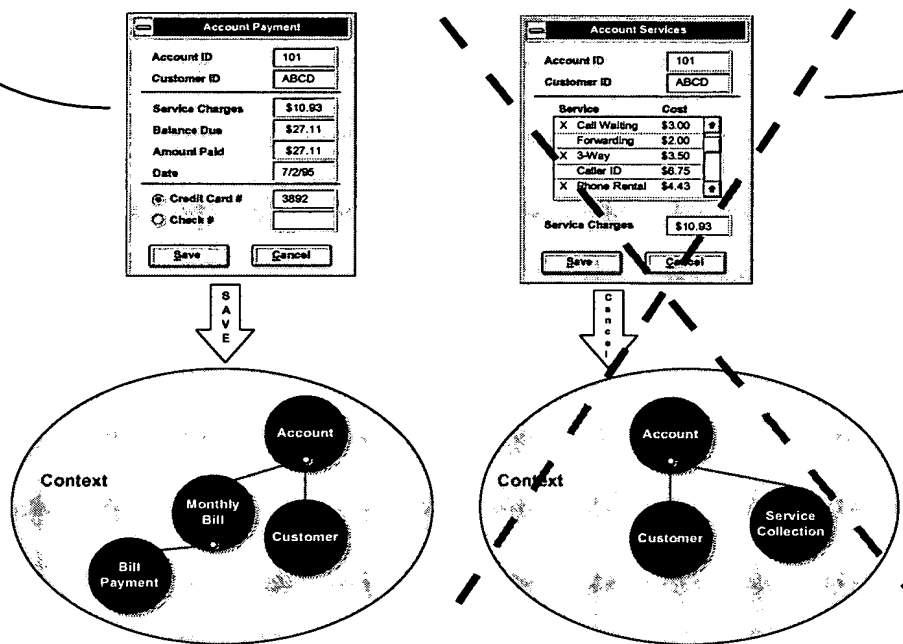


Figure 194

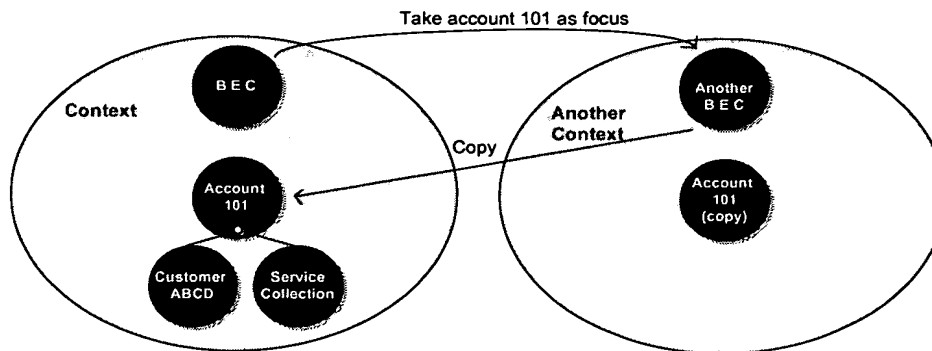


Figure 195

[illegible]